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Oceans and the law of the sea: law of the sea

Oceans and the law of the sea

Report of the Secretary-General

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I. Introduction

1. The present report is submitted in response to General Assembly resolution 52/26 of 26 November 1997, by which the Assembly requested the Secretary-General, *inter alia*, to report to it annually on developments pertaining to the implementation of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and on other developments and issues relating to ocean affairs and the law of the sea. The report is also presented in connection with General Assembly resolution 49/28 of 6 December 1994, in which the Assembly requested the Secretary-General to continue to carry out the responsibilities entrusted to him upon the adoption of the Convention.

2. During this year, proclaimed the International Year of the Ocean, developments in ocean affairs and the law of the sea have clearly signified the overall trend towards universal participation in and adherence to the legal regime established by UNCLOS. The three institutions created by UNCLOS, namely, the International Seabed Authority, the International Tribunal for the Law of the Sea and the Commission on the Limits of the Continental Shelf, have all been established and have commenced their substantive work in areas within their competence. The efforts of the international community are now directed at ensuring a coordinated approach for the implementation of UNCLOS through, *inter alia*, its consistent application by harmonizing national legislation and policy developments with the provisions of the Convention.

3. The new approach of States to adopt a national strategy for the ocean, based on the principle of integrated management, continues to develop. Such an approach appears to be the solution to promote proper coordination for efficient decision-making at the national level. A comprehensive and coherent national policy will certainly be more readily accepted at the international level, in particular when sectoral issues are discussed in different intergovernmental organizations or at different levels. If the sectoral and fragmented approach which is still maintained by many Governments continues, this may create a detrimental effect and might lead to losing sight of the fact that the problems of the oceans are closely interrelated and need to be considered as a whole.

4. The greatest impact of the Convention on the international agenda thus far has perhaps been its contribution to raising awareness of the fundamental importance of the oceans to the overall well-being of the planet. While the protection and the preservation of the marine environment should invariably remain a primary objective of the international community, States should not overlook the significance of ocean resources to overall development and economic growth. In other words, the international community must ensure that the resources of the seas are utilized and managed in a sustainable, environmentally sound manner in order to support and feed a growing world population.

5. The contribution of the resources and uses of the sea to the world economy is enormous. One recent study has estimated the value of all goods and services related to the oceans as $21 trillion, as compared with $12 trillion for those related to the land.[1] The numbers may be debatable but they undoubtedly underscore the importance of the oceans to the wealth of nations.

6. Technological and scientific advances continue to present new opportunities as well as challenges. Genetic resources derived from the seabed and the capacity to drill for oil and gas under deeper waters are just two examples of how science and technology can generate greater wealth from the sea. At the same time, it is imperative that such technological advances should be applied so as not to endanger the ocean environment, particularly sensitive coastal areas. The stability of the oceans depends to a great extent on the ability to anticipate problem areas and address them in an appropriate and efficient manner. This report therefore attempts to focus attention on those areas, whether they relate to the implementation of specific provisions of UNCLOS or to emerging issues, since the international community needs to cooperate and work in an integrated manner to address concerns before they become problems.

7. Although UNCLOS has brought remarkable stability to relations between States with respect to the oceans by contributing to international peace and security, there continues to be a need to address certain issues. The smuggling of aliens by sea is a major concern as is illicit traffic in narcotic drugs and substances. Piracy and armed robbery at sea are serious problems particularly in certain areas of the world. In addition, providing solutions to conflicting claims to ocean space and resources is a continuing task.

8. UNCLOS provides the framework to deal with these issues. In some respects, its moral authority, given its wide acceptance throughout the community of nations, is exactly what is required at this time in history. The General Assembly, given its oversight role in the area of ocean affairs and the law of the sea, will be called upon to take a more active part in anticipating areas of concern and devising strategies to address them effectively.

9. The Secretary-General wishes, therefore, to emphasize once again the importance of the "oceans and the law of the sea" debate in the General Assembly, in relation not only to the development of the new treaty system of ocean institutions and the effective implementation of UNCLOS, but also for promoting international cooperation on emerging issues in the field of ocean affairs and the law of the sea.

II. The Convention, the Implementing Agreements and the newly established institutions

A. United Nations Convention on the Law of the Sea

1. Status of the Convention

10. The United Nations Convention on the Law of the Sea (UNCLOS) entered into force on 16 November 1994, one year after the deposit of the sixtieth instrument of ratification. Since then, the Convention has received 67 more instruments of ratification, accession or succession, bringing the total number of States parties, including one international organization, to 127.[2] The regional representation among States parties is as follows: Africa – 37 parties from among 53 States; Asia and the Pacific – 36 parties from among 59 States; Latin America and the Caribbean – 26 parties from among 33 States; Europe and North America – 28 parties, including an international organization, the European Community, from among 48 States. Since the last report (A/52/487 and Corr.1), six States have deposited their instruments of ratification (Benin, Portugal, South Africa, Gabon, Lao People's Democratic Republic and Suriname). In addition, the European Community deposited its instrument of formal confirmation on 1 April 1998. These developments are further confirmation of the overall trend towards universal participation in and adherence to the legal regime established by the Convention.

2. Declarations and statements under article 310

11. Declarations upon ratification, accession or formal confirmation of UNCLOS have been made by 45 States and the European Community. In this respect it is also recalled that, from 1982 to 1984, 35 States made declarations or statements upon signature. The content of some declarations met with objections made by a number of States. All declarations and statements with respect to the Convention and to the 1994 Implementing Agreement on Part XI made before 31 December 1996 have been analysed and reproduced in a United Nations publication in the Law of the Sea series;[3] full texts of those made after this date have been circulated to Member States in depositary notifications and have been published in Law of the Sea Bulletins Nos. 36 and 37. They are also available on the Web site of the Division for Ocean Affairs and the Law of the Sea as well as that of the Treaty Section (www.un.org/Depts/los and www.un.org/Depts/Treaty, respectively).

12. Among States which have ratified the Convention since the last report (A/52/487) was issued, two made declarations, namely Portugal and South Africa. The European Community, upon the deposit of its instrument of formal confirmation, also made a declaration concerning the competence of the European Community with regard to matters governed by the Convention and the Agreement relating to the implementation of Part XI of the Convention, pursuant to article 5, paragraph 1, of Annex IX to the Convention and to article 4, paragraph 4, of the Agreement.

13. The European Community declared its acceptance, in respect of matters for which competence has been transferred to it by those of its member States which are parties to the Convention, of the rights and obligations laid down for States in the Convention and the Agreement. It further stated that it did not consider that the Convention recognized the rights or jurisdiction of coastal States regarding the exploitation, conservation and management of fishery resources other than sedentary species outside their exclusive economic zone.

14. According to the declaration, the European Community has exclusive competence with regard to the conservation and management of fishing resources. This competence applies to waters under national fisheries jurisdiction and to the high seas. Nevertheless, in respect of measures relating to the exercise of jurisdiction over vessels, the flagging and registration of vessels and the enforcement of penal and administrative sanctions, competence rests with the member States. By virtue of its commercial and customs policy, the European Community has further competence in respect of those provisions of Parts X and XI of the Convention and of the 1994 Implementing Agreement which are related to international trade.

15. With regard to fisheries, the European Community shares competence with its member States for a certain number of matters that are not directly related to the conservation and management of fishing resources, for example research and technological development and development cooperation. With regard to the provisions on maritime transport, safety of shipping and the prevention of marine pollution, it has exclusive competence only to the

extent that such provisions of the Convention or legal instruments adopted in implementation thereof affect common rules established by the European Community.

16. With regard to the provisions of Parts XIII and XIV of UNCLOS, the European Community's competence relates mainly to the promotion of cooperation in research and technological development with non-member countries and international organizations and its activities complement the activities of the member States. The declaration also made mention of the European Community's policies and activities in the fields of control of unfair economic practices, government procurement and industrial competitiveness as well as in the area of development aid. These policies may also have some relevance to the Convention and the Agreement, in particular with regard to certain provisions of Parts VI and XI of the Convention. The European Community declared its objection to any declaration or position excluding or amending the legal scope of the provisions of the Convention, in particular those relating to fishing activities.

17. It should be recalled that in General Assembly resolution 52/26 the Assembly called upon States, *inter alia*, to harmonize their national legislation with the provisions of the Convention, to ensure that any declarations or statements that they have made or make when signing, ratifying or acceding are in conformity with the Convention and to withdraw any of their declarations or statements that are not.

18. The Secretary-General notes that at least 14 out of 46 declarations made upon ratification or accession (7 out of 28 declarations made after the entry into force of the Convention) seem not to be in conformity with the provisions of article 310 or to be supported by any other provision of the Convention nor by any rule of general international law.

3. Declarations under articles 287 and 298

19. Since the last report was issued, two States have made declarations under articles 287 or 298. The United Kingdom of Great Britain and Northern Ireland chose, in accordance with article 287, paragraph 1, of the Convention, the International Court of Justice for the settlement of disputes concerning the interpretation or application of the Convention. It further stated that the International Tribunal for the Law of the Sea was a new institution, which the United Kingdom hoped would make an important contribution to the peaceful settlement of disputes concerning the law of the sea. In addition to those cases where the Convention itself provided for the compulsory jurisdiction of the Tribunal, the United Kingdom remained ready to consider the submission of disputes to the Tribunal as might be agreed on a case-by-case basis.

20. Portugal declared that, in the absence of non-judicial means for the settlement of disputes arising out of the application of the Convention, it would choose one of the following means for the settlement of disputes: the International Tribunal for the Law of the Sea; the International Court of Justice; an arbitral tribunal; or a special arbitral tribunal. Portugal further declared that, with respect to the application or interpretation of the provisions of the Convention relating to fisheries, the protection and preservation of marine living resources and the marine environment, scientific research, navigation and marine pollution, and in the absence of any other peaceful means for the settlement of disputes, it would choose the recourse to a special arbitral tribunal. It also declared that it did not accept the compulsory procedures referred to in Part XV, section 2, of the Convention with respect to the categories of disputes specified in article 298, paragraph 1(a),(b) and (c), i.e. disputes dealing with sea boundary delimitations, historic bays or titles, military activities; or those in respect of which the Security Council is exercising the functions under the Charter of the United Nations.

21. As of 30 September 1998, 21 States had made their choice of procedure as provided for in article 287. This information will be reflected in Law of the Sea Information Circular (LOSIC) No. 8.

B. Agreement relating to the implementation of Part XI of UNCLOS

1. Status of the Agreement

22. The Agreement relating to the implementation of Part XI of the Convention was adopted on 28 July 1994 (General Assembly resolution 48/263) and entered into force on 28 July 1996. The Agreement is to be interpreted and applied together with the Convention as a single instrument, and in the event of any inconsistency between the Agreement and Part XI of the Convention, the provisions of the Agreement shall prevail. Any ratification or accession to the Convention made after 28 July 1994 represents consent to be bound by the Agreement as well. Furthermore, no State or entity can establish its consent to be bound by the Agreement unless it has previously established or establishes concurrently its consent to be bound by the Convention. States that were parties to the Convention prior to the adoption of the Agreement have to establish their consent to be bound by the

Agreement separately, by depositing an instrument of ratification or accession.

23. As of 30 September 1998, a total of 91 States parties to the Convention, including the European Community, were, as of that date, bound by the Agreement. As of that date, the following States parties, which are applying the Agreement de facto and are members of organs established in accordance with its provisions, had not yet taken the necessary steps to become parties to it: Angola, Antigua and Barbuda, Bahrain, Bosnia and Herzegovina, Botswana, Brazil, Cameroon, Cape Verde, Comoros, Costa Rica, Cuba, Democratic Republic of the Congo, Djibouti, Dominica, Egypt, Gambia, Ghana, Guinea-Bissau, Guyana, Honduras, Indonesia, Iraq, Kuwait, Mali, Marshall Islands, Mexico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sao Tome and Principe, Somalia, Sudan, Tunisia, Uruguay, Viet Nam and Yemen.

2. Notifications for provisional membership

24. The provisional application of the Agreement relating to the implementation of Part XI of the Convention terminated on the date of its entry into force, 28 July 1996. In accordance with the provisions of the Agreement, States and entities which had been applying it provisionally, and for which it was not yet in force, were able to continue to be members of the Authority on a provisional basis pending its entry into force for those States and entities. To continue provisional membership, they were required to send a written notification to the Secretary-General of the United Nations and, after 16 November 1996, could retain that status up to 16 November 1998 on the basis of a decision of the Council of the International Seabed Authority. The Council approved a number of requests for the extension of membership on a provisional basis. As of 30 September 1998, 11 States (Bangladesh, Belarus, Belgium, Canada, Nepal, Poland, Qatar, Switzerland, Ukraine, United Arab Emirates and United States of America) continued to be members of the Authority on a provisional basis while making efforts in good faith to become parties to the Agreement and the Convention. Unless those States become parties to the Convention and the 1994 Implementing Agreement before 16 November 1998, they will cease to be members of the Authority on a provisional basis.

C. Agreement for the implementation of the provisions of UNCLOS relating to the conservation and management of straddling fish stocks and highly migratory fish stocks

1. Status of the Agreement

25. The Agreement for the implementation of the provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the conservation and management of straddling fish stocks and highly migratory fish stocks (the 1995 Fish Stocks Agreement) was adopted on 4 August 1995 by the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks. Unlike the 1994 Agreement relating to the implementation of Part XI of the Convention, there is no direct linkage between the 1995 Fish Stocks Agreement and the Convention with respect to establishing the consent to be bound.

26. The Agreement was opened for signature until 4 December 1996 and received a total of 59 signatures. As of 30 September 1998, 18 States have ratified it.[4] It will enter into force 30 days after the date of deposit of the thirtieth instrument of ratification or accession. Although the Agreement provides, in its article 41, for the possibility of its provisional application, no State or entity has notified the depositary of its wish to do so.

2. Declarations and statements under article 43

27. Pursuant to article 43 of the Agreement, four States (China, France, Netherlands, Uruguay) and the European Community made declarations upon signature, and four States (Mauritius, Norway, Russian Federation, United States of America) upon ratification or accession. Several of those declarations have been of an interpretative nature and dealt with, *inter alia*, flag State jurisdiction within the context of enforcement, conservation and management measures on the high seas and over the inspection of fishing vessels (arts. 21, 22 and 23). The declaration by the European Community also specified the competence of the European Community and that of its member States. All declarations have been circulated to Member States in depositary notifications and have been published in Law of the Sea Bulletins Nos. 30, 32, 33 and 34. No new declaration has been made since the last report was issued.

3. Declarations concerning settlement of disputes

28. As stated in the last report (A/52/487), three States had made declarations upon ratification pursuant to article 30 of the Agreement with respect to the procedures for the settlement of disputes: Norway, United States of America and Russian Federation. No new declaration concerning settlement of disputes has been made.

D. Institutions created under UNCLOS

1. International Seabed Authority

29. The International Seabed Authority is the organization through which States parties to the Convention shall, in accordance with the regime, established in Part XI of the Convention and the 1994 Implementing Agreement, for the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction (the "Area"), organize and control activities in the Area, in particular with a view to administering the resources of the Area. The Authority commenced functioning on 16 November 1994, the date of entry into force of UNCLOS, pursuant to its article 308, paragraph 3. As of 30 September 1998, there were 138 members of the Authority, including 11 members on a provisional basis.

30. In the past year, the Authority has made considerable progress in its substantive work, including significant progress in drafting the seabed mining code. A number of organizational matters were also completed, including the entry into force of the Relationship Agreement between the United Nations and the Authority on 26 November 1997 as well as the adoption on 26 March 1998, and the subsequent opening for signature on 17 August 1998, of the Protocol on the privileges and immunities of the Authority.

31. The first and second parts of the fourth session of the Authority were held at Kingston, Jamaica, from 16 to 27 March 1998, and from 17 to 28 August 1998, respectively. The Authority met in New York on 12 and 13 October 1998, to deal primarily with the matter of the scale of assessments for the budget of the Authority for 1999.

32. The initial draft seabed mining code was prepared by the 22-member expert body of the Authority, i.e. the Legal and Technical Commission, in August 1997 and was presented to its Council for review in March 1998 (ISBA/4/C/4/Rev.1). During the first and second parts of the fourth session, the Council carried out its review of the draft and will continue the review on a priority basis at the fifth session, scheduled to be held at Kingston from 9 to 27 August 1999. The draft text deals with the prospecting and exploration for polymetallic nodules, one of three types of minerals to be found in the Area, having economically attractive metal contents of copper, nickel, cobalt and manganese. The text represents the first part of a broader mining code that is to encompass rules, regulations and procedures for the conduct of activities in the Area as they progress. It basically sets out an exploration regime for polymetallic nodules along with annexes containing a model exploration contract and standard contract clauses.

33. It should be recalled that the most significant development in the implementation of the deep seabed mining regime, established by the Convention and the 1994 Implementing Agreement, occurred in 1997 when the plans of work for exploration of seven registered pioneer investors were approved by the Authority. Once the seabed mining code is approved by the Authority, the seven pioneer investors would be granted exploration contracts.

34. While the work continues on the mining code covering polymetallic nodules, the two other types of minerals found in the Area are gaining in importance: polymetallic sulphides with economically attractive metal contents of gold, silver, copper and zinc, and cobalt-bearing crusts having a similar metal composition as polymetallic nodules but with a much higher cobalt content. During the August 1998 session of the Authority, the Russian Federation formally requested the Authority to adopt rules on exploration for these minerals in view of the systematic research and survey activities that are being currently carried out in respect of these minerals (ISBA/4/A/CRP.2).

35. Other substantive work of the Authority during the past year included the convening, in cooperation with the Government of China, of a workshop on the development of guidelines for the assessment of possible environmental impacts arising from exploration for deep seabed polymetallic nodules. The workshop was held at Sanya, Hainan Island, China, from 1 to 5 June 1998. The Authority is planning to convene two additional workshops in the future, one covering the available knowledge on minerals other than polymetallic nodules found in the Area, and another on the technologies envisaged for exploration and exploitation of polymetallic nodules and for the protection of the environment (ISBA/4/A/11).

36. In addition to the Relationship Agreement between the United Nations and the Authority, a draft agreement concerning the relationship between the Authority and the International Tribunal for the Law of the Sea was drawn up. This would be considered by the Authority in the next session. The draft headquarters agreement between the Authority and the Government of Jamaica (ISBA/3/C/L.3),

the draft financial regulations and the draft staff regulations of the Authority will be considered during that session.

37. During the August 1998 session, the Assembly approved the budget of the Authority for 1999, amounting to $5,011,700, composed of $3,811,400 for operational and administrative functions including staff costs (36 posts, comprising 19 posts at the Professional level and above and 17 posts at the General Service level), and $1,200,300 for conference-servicing costs (ISBA/4/A/17). The budget reflects an increase of 6.5 per cent over the budget for 1998. With regard to the scale of assessment for contributions of members of the Authority to its 1999 budget, at its meeting on 13 October 1998, the Authority decided that the scale would be based on that used for the regular budget of the United Nations for 1998 (ISBA/4/A/L.7).

38. The General Assembly in its annual resolutions "requests the Secretary-General to ensure that the institutional capacity of the Organization adequately responds to the needs of States, the newly established institutions (including the International Seabed Authority and the Tribunal) and other competent international organizations by providing advice and assistance" (resolution 52/26, para.10). Pursuant to this mandate, the Division for Ocean Affairs and the Law of the Sea has been providing advice and assistance to the Authority, especially through participation in its sessions. In 1997, the Division also assisted the Authority by informing the World Trade Organization (WTO) about the consistency of the trade-related provisions of the deep seabed mining regime, as established by Part XI of the Convention and the 1994 Implementing Agreement, with the provisions of the WTO; and about the convergence of the dispute settlement procedures in trade-related matters under the deep seabed mining regime with those of WTO.[5]

2. International Tribunal for the Law of the Sea

39. The International Tribunal for the Law of the Sea has been in existence for two years. During the period under review, the Tribunal held two sessions. The fourth session was held from 1 to 31 October 1997 and the fifth session from 21 September to 16 October 1998.

Chambers of the Tribunal

40. The Seabed Disputes Chamber and the other three standing chambers, namely the Chamber of Summary Procedure, the Chamber for Fisheries Disputes and the Chamber for Marine Environment Disputes established in 1997,[6] are ready to deal with cases in their respective areas of competence.

41. An important achievement in 1997 was the adoption of the Rules of the Tribunal at the fourth session on 28 October 1997. A working group was established to consider the Rules based on the final draft Rules of the Tribunal prepared by the Preparatory Commission for the International Seabed Authority and the International Tribunal for the Law of the Sea which the Tribunal had decided to apply provisionally pending formal adoption of its Rules. This enabled the Tribunal to deal with cases which might come before it. Consideration of the Rules was concluded during the fourth session and the Tribunal then formally adopted the Rules.

42. The Rules of the Tribunal consist of 138 articles adopted concurrently in English and French, which are the working languages of the Tribunal. The Rules are user-friendly and cost-effective for both the Tribunal and the parties to a dispute and would promote the expeditious handling of cases. They set out the organization of the Tribunal, the responsibilities of the Registrar and the organization of the Registry. They also provide a set of procedural steps to be followed in the handling of cases, i.e. from the institution of proceedings through the different stages of written pleadings and hearings to the delivery of a judgment. The complete Rules of the Tribunal can be found on the Web site of the Division for Ocean Affairs and the Law of the Sea (see paras. 488–491).

43. The Tribunal at its fourth session also considered the resolution on the internal judicial practice pursuant to article 40 of the Rules of the Tribunal. The resolution was formally adopted on 31 October 1997. It sets out procedures by which the Tribunal shall reach decisions in cases submitted to it and the methods to be used for deliberation of cases and for the drafting of judgments. The resolution is also posted on the Web site of the Division (see paras. 488–491).

44. At the same session, the Tribunal considered and adopted the guidelines concerning the preparation and presentation of cases before the Tribunal in accordance with article 50 of its Rules. It is intended that the guidelines will be issued in the form of a handbook which would provide the parties appearing before the Tribunal with practical information concerning proceedings in cases, including the length, format and presentation of written and oral pleadings and the use of electronic means of communication.

Financial matters

45. The budget of the Tribunal for 1999 and a supplementary budget for 1998 were adopted by the Meeting of States Parties at its eighth session held in New York from 18 to 22 May 1998 (see SPLOS/L.9 and L.10). The approved

budget for 1999 amounted to a total of $6,983,817. The breakdown of the budget is as follows: (a) a recurrent expenditure of $6,833,817 including $2,617,257 for the remuneration of the judges, $29,167 for the pension scheme for the judges, and $3,097,060 for salaries and related costs of staff (12 posts at the Professional level and above, and 20 posts for the General Service level) as well as for temporary assistance, maintenance of premises, library and various other services; and (b) a non-recurrent expenditure of $150,000, essentially for the acquisition of furniture and equipment. As in the previous year, no contingency provision was made in the budget but the Tribunal was authorized to transfer funds between appropriation sections to deal with cases which might arise during the budget period (see SPLOS/L.9, para. 3), on the understanding that if such transfer became necessary, the Tribunal would make a full report thereon to the Meeting of States Parties (see SPLOS/31, para. 25). In addition, the Meeting of States Parties approved the establishment of a Working Capital Fund and authorized the Tribunal, on an exceptional basis, to credit the fund with savings from appropriations in the budget up to a maximum of $200,000. The Eighth Meeting approved the sum of $356,864 for the budget of the International Tribunal for the Law of the Sea for 1998 as a supplementary appropriation to cover the overexpenditures incurred by the Tribunal in 1996–1997.

46. The European Community, having become a State party to the Convention on 1 May 1998, is required to contribute to the budget of the Tribunal in accordance with annex VI, article 19, and annex IX to the Convention. The Community expressed its commitment to contribute a lump sum of $75,000 to the 1999 budget of the Tribunal and the same amount to the 1998 budget prorated for the period 1 May to 31 December 1998. Although the Meeting took note of this commitment, the majority of the delegations were of the opinion that the amount to be contributed by the European Community to the budget of the Tribunal should be decided by the Meeting of States Parties on the basis of an agreed formula. In this context, it was therefore understood that the contribution of the lump sum of $75,000 by the European Community to the 1999 budget of the Tribunal was without prejudice to future decisions of the Meeting of States Parties on the matter (see SPLOS/31, paras. 31 and 32).

47. The draft financial regulations of the Tribunal (SPLOS/WP.6) were submitted to the eighth Meeting of States Parties for approval in accordance with the decision of the fifth Meeting of States Parties (see SPLOS/14). Several issues were raised during the discussion of the draft, in particular the rules dealing with the presentation of the budget and the question of the transfer of funds between appropriations. The delegation of the European Community proposed drafting changes referring to contributions to be made to the budget of the Tribunal by international organizations which are parties to the Convention. Several delegations felt that there was no need for such changes since international organizations had in practice the same rights and obligations as other States parties. A number of delegations also felt that they needed more time to study the draft financial regulations and were therefore not ready to adopt them. Consequently, the eighth Meeting of States Parties agreed that the draft would be taken up at its next session and requested the Tribunal to submit a revised version of the document taking into consideration comments, proposals and amendments made by delegations during the discussion (SPLOS/31, paras. 33–36).

Agreements

48. The Agreement on the Privileges and Immunities of the International Tribunal for the Law of the Sea, adopted at the seventh Meeting of States Parties, was opened for signature on 1 July 1997 and will remain open for 24 months until 1 July 1999 at United Nations Headquarters. To date, the Agreement has been signed by: Argentina, Greece, Jordan, Norway, Senegal and United Kingdom of Great Britain and Northern Ireland. The Agreement, which requires ratification by 10 States to enter into force, has so far been ratified by Norway.

49. The Agreement on Cooperation and Relationship between the United Nations and the International Tribunal for the Law of the Sea was concluded and signed by the Secretary-General of the United Nations and the President of the Tribunal on 18 December 1997 at United Nations Headquarters. The General Assembly at its fifty-second session approved the Agreement on 8 September 1998 (resolution 52/251). The Agreement provides for, *inter alia*: (a) exchange of information and relevant documents; (b) cooperation between the two institutions; and (c) exchange of facilities and services on a reimbursable basis.

50. An interim ordinance was adopted by the host country, Germany, to enable the Tribunal to function pending the conclusion of a Headquarters Agreement. The relevant provisions of the Convention on the Privileges and Immunities of the Specialized Agencies of the United Nations of 21 November 1947 applies *mutatis mutandis* to the Tribunal. It is envisaged, however, that the Headquarters Agreement will be signed soon by the Tribunal and the host Government and presented to the German Parliament for adoption.

51. Progress has also been made towards the conclusion of an additional agreement between the host Government and the Tribunal concerning the occupancy and use of the temporary premises of the Tribunal. This would precede the agreement on the occupancy and use of the permanent premises scheduled to be completed by 1999 (SPLOS/27, paras. 70–72).

Judicial work of the Tribunal

52. On 13 November 1997, the Tribunal received its first application under article 292 of the Convention which was filed by Saint Vincent and the Grenadines against the Republic of Guinea. The dispute concerned the prompt release of the M/V *Saiga*, an oil tanker flying the flag of Saint Vincent and the Grenadines, which was arrested and detained by customs officials of the Republic of Guinea on 28 October 1997. In the application, Saint Vincent and the Grenadines requested that the vessel, its master, its cargo and crew be promptly released in accordance with article 292 of the Convention. It alleged that Guinea had not complied with article 73, paragraph 2, of the Convention and that it had no jurisdiction to arrest the vessel. The Republic of Guinea, on the other hand, contended that the ship was involved in smuggling, which was an offence under the Customs Code of Guinea, and that the detention had taken place after the exercise by the Republic of Guinea of the right of hot pursuit in accordance with article 111 of the Convention.

53. The Tribunal, after six days of oral proceedings and three weeks after the filing of the application by Saint Vincent and the Grenadines, delivered its judgment on 4 December 1997. It ordered the Republic of Guinea to promptly release the M/V *Saiga* and its crew from detention.

54. On 13 January 1998, Saint Vincent and the Grenadines filed with the Tribunal a request under article 290, paragraph 5, of UNCLOS for the prescription of provisional measures, pending the constitution of an arbitral tribunal. On 20 February 1998, Saint Vincent and the Grenadines and the Republic of Guinea agreed by an exchange of letters to submit to the Tribunal both the merits and the request for the prescription of provisional measures with regard to the arrest and detention of the M/V *Saiga* by the authorities of Guinea on 28 October 1997. After the proceedings were under way, Guinea released the vessel on 4 March 1998 in compliance with the judgment of the Tribunal of 4 December 1997. The Tribunal therefore no longer had to deal with the release of the vessel. However, the Tribunal on 11 March 1998 issued an order which included, *inter alia*, that Guinea refrain from carrying out its national court's decision or any other administrative measure against the M/V *Saiga*, its master and crew as well as its owners or operators. The application on the merits of the case is pending before the Tribunal, awaiting the submission of a written Counter-Memorial from the Republic of Guinea.[7]

3. Commission on the Limits of the Continental Shelf

55. The Commission on the Limits of the Continental Shelf was established in 1997 with the election of its 21 members on 13 March 1997 during the sixth Meeting of States Parties to the United Nations Convention on the Law of the Sea. It held its first and second sessions in New York in 1997. During the sessions, the Commission completed the drafting of its Rules of Procedure, except for two annexes, as well as its modus operandi (for details, see A/52/487, paras. 43–53). The Commission held its third and fourth sessions in New York from 4 to 15 May and from 31 August to 4 September 1998.

56. The Commission had decided at its second session that annex I of its Rules of Procedure (CLCS/3/Rev.1), entitled "Submissions in case of a dispute between States with opposite or adjacent coasts, or in other cases of unresolved land or maritime disputes", would be adopted only after it had been considered by the eighth Meeting of States Parties to the Convention.

57. At the fourth session of the Commission, the Chairman reported to the members of the Commission on the results of the deliberations which had taken place during the eighth Meeting of States Parties (SPLOS/31, paras. 41–56) on the issues submitted to it by the Commission (SPLOS/28).

58. The Chairman noted that in regard to annex I of the Rules of Procedure, it had been pointed out that the Rules should be drafted in a neutral manner and should be limited to specifying what the Commission could or could not do. In accordance with the understanding reached during that Meeting, the Commission considered and approved editorial changes proposed by the Chairman to make it clear that the rules dealt only with the procedures of the Commission, and not with the rights and obligations of States.

59. The Commission further considered comments and proposed amendments to annex I to the Rules of Procedure communicated to the Chairman by India, Mexico, the Republic of Korea and the United States. The Commission concluded that the issues raised in those communications had already been extensively addressed. Since the comments and amendments did not enjoy consensus support, the Commission did not reopen the discussion of annex I.

60. The adoption of annex II on confidentiality had been postponed by the Commission at its second session pending a positive resolution of the question raised as to the liability of its members in the event of an allegation by a submitting State that a breach of confidentiality had taken place. At that session, the Commission decided to request the opinion of the United Nations Legal Counsel as to whether members were entitled to enjoy the privileges and immunities of United Nations experts on mission.

61. In reply, the Legal Counsel provided the Commission with "the legal opinion on the applicability of the Convention on the Privileges and Immunities of the United Nations to the members of the Commission" (CLCS/5), which stated that "it would appear that, by established precedent, in respect to similar treaty organs, the members of the Commission on the Limits of the Continental Shelf can be considered to be experts on mission covered by article VI of the General Convention [Convention on the Privileges and Immunities of the United Nations]".

62. The Chairman reported that the Meeting of States Parties to UNCLOS had taken note of the opinion by the Legal Counsel. In this respect, the issue of the liability of the members of the Commission, in the event of an allegation by a submitting State that a breach of confidentiality had taken place, had been effectively and satisfactorily addressed.

63. The Commission also considered comments on rule 5, paragraph 2, of annex II to the Rules of Procedure and agreed to incorporate several amendments in annex II and to add a new rule 7 on the return of confidential data to the coastal State. These changes were adopted after the consideration of comments communicated to the Chairman by Germany and the United States. On 4 September 1998, the Commission formally adopted its Rules of Procedure.

64. The Commission also decided to seek the legal opinion of the Legal Counsel as to which procedure would be the most appropriate in cases where it might be necessary to institute proceedings following an alleged breach of confidentiality.

65. During its third session, the Commission established an Editorial Working Group on its Scientific and Technical Guidelines which are aimed at assisting coastal States to prepare their submissions regarding the outer limits of their continental shelf. A first draft of the document was completed before the end of the session. It was decided to continue the work inter-sessionally, and that all further changes would be incorporated into the text to be further discussed at the next session.

66. At its fourth session, the Commission considered the Guidelines and adopted them provisionally (to be issued as CLCS/L.6). It was also agreed that, pending formal adoption at the next session, the Guidelines could be provisionally applied. The parts of the text on which consensus has yet to be reached would be indicated by square brackets, and members could propose further amendments on the text as a whole.

67. Regarding whether the interpretation of the terms "States" and "coastal States" included a State which was not a party to the Convention, the Commission took note of the recommendation by the Meeting of States Parties and decided to request a legal opinion from the United Nations Legal Counsel only if the actual need arose.

68. With respect to the creation of a trust fund to assist in financing the participation of members of the Commission from developing countries, the Commission requested its Chairman to address a letter to the Meeting of States Parties seeking a decision on this matter. The members also indicated their expectation that this issue would be raised during the fifty-fourth session of the General Assembly next year.

69. The Commission decided that two sessions would be held in 1999: the fifth session for two weeks, from 3 to 14 May 1999 with a view, *inter alia*, to adopting the Scientific and Technical Guidelines; the sixth session is scheduled from 30 August to 3 September 1999. However, it was also decided that if no submission from a State is received, the Commission will reconsider the duration of next year's sessions in the light of the actual workload.

E. Meetings of States Parties

70. The eighth Meeting of States Parties to the Convention, convened by the Secretary-General in accordance with article 319, paragraph 2 (e), of the Convention, took place from 18 to 22 May 1998. The Meeting dealt primarily with the draft budget of the International Tribunal for the Law of the Sea for 1999 and supplementary budget for 1996–1997 (SPLOS/WP.8), the rules of procedure of the Meeting of States Parties (SPLOS/2/Rev.3 and Add.1), in particular rule 53 on decisions on questions of substance, and the role of the Meeting of States Parties in reviewing ocean and law of the sea issues. It also considered several items submitted to it by the Commission on the Limits of the Continental Shelf.

71. The Meeting approved the 1999 budget for the Tribunal (SPLOS/WP.5), the establishment of a Working

Capital Fund and additional appropriations to cover overexpenditures in the 1996–1997 budgetary period (see para. 45 above).

72. The Meeting also considered the matter of pensions for the judges of the International Tribunal for the Law of the Sea. It was decided that the Meeting should adopt a decision on that matter before the first judges completed their terms, i.e. before 30 December 1999, and to include the item on the agenda of the ninth Meeting.

73. The Chairman of the Commission on the Limits of the Continental Shelf had addressed a letter (SPLOS/28) covering issues that the Commission wished the Meeting of States Parties to consider (see paras. 57–64 and 67–68).

74. An extensive discussion took place focused on rule 53 of the Rules of Procedure of the Meeting of States Parties (SPLOS/2/Rev.3), namely whether a two-thirds majority was sufficient on questions of substance relating to financial and budgetary matters, and whether a finance committee should be established. No consensus was reached on either the modalities of decision-making in financial or budgetary matters or on the finance committee, and the Meeting decided to place the item on the agenda of its next meeting.

75. Two non-governmental organizations, the International Chamber of Shipping and the Seamen's Church Institute, were invited by the Meeting to participate as observers. They drew the attention of the Meeting to the growing problem of piracy in many parts of the world, where pirate activities occurred frequently in the territorial seas of many coastal States. They observed that many incidents had been under-reported, and in many cases there appeared to be a lack of political will or financial resources to combat piracy. They called for new mechanisms to eradicate piracy, and for the issue to be kept prominently on the agenda of the United Nations. (See also paras. 145–153.) They also expressed their concerns with regard to the working conditions of seafarers, the failure of flag States to comply with their duties under article 94 of the Convention and port State policies at variance with article 98 of the Convention.

76. Some delegations noted that these matters were being given high priority by their Governments and that regional efforts to cooperate in eradicating piracy and armed robbery at sea were ongoing. Others pointed out that the matters could be more usefully raised in the United Nations General Assembly and in the International Maritime Organization.

77. In summing up the proceedings of the Meeting, the President noted, *inter alia*, that, regarding the budget of the Tribunal, it was reasonable and commensurate with the goals of an instrument created for the peaceful settlement of maritime disputes, but added that it was not sufficient to merely approve the budget and that States parties must comply with their financial obligations and that full and timely payment of their assessed contributions were essential.

78. The ninth Meeting of States Parties to the Convention will be held in New York from 19 to 28 May 1999. Since the term of seven judges of the Tribunal will expire in 1999, new elections will be held on 24 May 1999. Among the items on the agenda will be the report of the International Tribunal for the Law of the Sea to the Meeting of States Parties to be considered in accordance with rule 6 of the Rules of Procedure of the Meeting of States Parties; the draft budget of the Tribunal for 2000; the conditions under which retirement pensions may be given to judges of the Tribunal under article 18, paragraph 7, of annex VI to the Convention; and the draft financial regulations of the Tribunal.

F. Dispute settlement mechanisms

79. The obligation to settle disputes by peaceful means is provided for in Part XV of UNCLOS. Among the dispute settlement mechanisms envisaged by the Convention are arbitration and conciliation.

Arbitration

80. UNCLOS stipulates that any party to a dispute may submit the dispute to the arbitral procedure provided for in Annex VII of the United Nations Convention on the Law of the Sea by a written notification addressed to the other party or parties to the dispute. The Convention also stipulates that every State party shall be entitled to nominate four arbitrators, each of whom shall possess experience in maritime affairs and enjoy the highest reputation for fairness, competence and integrity. The names of persons so nominated shall constitute the list which shall be drawn up and maintained by the Secretary-General of the United Nations. The list is currently made up of the following arbitrators: Dr. Vladimir Kopal, nominated by the Czech Republic; Messrs Daniel Bardonnet, Pierre-Marie Dupuy, Jean-Pierre Quéneudec and Laurent Lucchini, nominated by France; Dr. Renate Platzoeder, nominated by Germany; Mr. Adriaan Bos, Mrs. E. Hey and Professor A. Soons, nominated by the Netherlands; Messrs Vladimir S. Kotliar, Vladimir N. Trofimov and Professor Kamil A. Bekyashev, nominated by the Russian Federation; the Hon. M. S. Aziz, Mr. S. Sivarasan, Dr. C. F. Amerasinghe and Mr. A. R. Perera, nominated by Sri Lanka; Sayed Shawgi Hussain and Dr. Ahmed Elmufti, nominated by the Sudan; and Professors

Christopher Greenwood and Elihu Lauterpacht C.B.E. Q.C. and Sir Arthur Watts K.C.M.G. Q.C., nominated by the United Kingdom.

Conciliation

81. UNCLOS also stipulates that parties to a dispute may agree, in accordance with its article 284, to submit their dispute to conciliation procedures. In accordance with Annex V of UNCLOS, each State party is entitled to nominate four conciliators, each of whom shall be a person enjoying the highest reputation for fairness, competence and integrity. Persons nominated shall constitute the list, which shall be drawn up and maintained by the Secretary-General of the United Nations. The following is the current list of conciliators: Dr. Vladimir Kopal, nominated by the Czech Republic; the Hon. M. S. Aziz, Mr. S. Sivarasan, Dr. C. F. Amerasinghe and Mr. A. R. Perera, nominated by Sri Lanka; and Dr. Abderahman El Khalifa and Sayed Eltahir Hamadalla, nominated by the Sudan.

Special arbitration

82. UNCLOS further stipulates that any party to a dispute concerning the interpretation or application of the articles of the Convention relating to fisheries, the protection and preservation of the marine environment, marine scientific research or navigation including pollution from vessels and from dumping, may submit the dispute to a special arbitral procedure provided for in Annex VIII to the Convention. When a dispute is submitted, the special arbitral tribunal shall, in accordance with Annex VIII, article 2, of the Convention, be constituted and shall be composed of five members preferably from the list which is drawn up and maintained by the specialized agencies of the United Nations in their field of competence. Every State party is entitled to nominate two experts in each field whose competence in legal, scientific or technical aspects of such fields is established and generally recognized and who enjoy the highest reputation for fairness and integrity. The following specialized agencies are required to draw up and maintain the list of experts: in the field of fisheries, the Food and Agriculture Organization of the United Nations (FAO); for the protection and preservation of the marine environment, the United Nations Environment Programme (UNEP); for marine scientific research, the Intergovernmental Oceanographic Commission (IOC); and for navigation, including pollution from vessels and by dumping, the International Maritime Organization (IMO). Copies of the lists are sent by the specialized agencies to the Secretary-General of the United Nations.

83. As of 30 September 1998, the Secretary-General has received updated lists from IMO and FAO and a comprehensive list from UNEP. The various lists are also available in the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, and have been published in the Law of the Sea Information Circular.

III. Maritime space

A. Practice of States: regional review

84. The following review, on a regional basis, of main developments relating to legislation, delimitation treaties and State practice shows a wide degree of acceptance of the provisions of UNCLOS by many States, whether they are parties or non-parties.

85. The positive trend of States adapting their legal practice to the provisions of the Convention should not lead to the conclusion that the provisions of the Convention are fully respected in all cases. There are several examples where national legislation departs from the rules set out in the Convention: legislation containing provisions not conforming to the Convention, include those requesting prior notification or authorization for the exercise of the right of innocent passage in the territorial sea, or regulating marine scientific research in a manner not in conformity with the consent regime established in the Convention. It is important to recall, in this respect, the unified character of the Convention, which has been frequently reaffirmed, including by the General Assembly in its resolution 52/26. It is also relevant to note that many States, both parties and non-parties, still have legislation in force which has not been harmonized with the Convention.

86. A brief regional summary of developments in State practice, during the past year ending on 30 September 1998, is provided below:

1. Africa

87. Nigeria on 1 January 1998 adopted the Territorial Waters (Amendment) Decree 1998 which rolls back Nigeria's outer limit of its territorial sea from 30 to 12 nautical miles. (The Decree will be published in Law of the Sea *Bulletin No. 38*.)

88. Sao Tome and Principe communicated to the United Nations its Act No. 1/98 of 23 March 1998, which revokes previous Decrees or Laws 14/78, 15/78 and 48/82. The Act provides for the establishment of the internal waters, archipelagic waters, territorial sea and exclusive economic

zone of Sao Tome and Principe. These maritime areas are established with the purpose of safeguarding Sao Tome and Principe's rights and interests with regard to living and non-living resources. (See Law of the Sea *Bulletin No. 37.*)

2. Asia and the Pacific

89. On 16 June 1998, Indonesia promulgated Government Regulation No. 61 of 1998 on the list of geographical coordinates of the archipelagic baselines of Indonesia in the Natuna Sea. The Natuna Sea, located north-west of the coast of Borneo, includes the seas around Bintan island, the Anambas islands, the Natuna Utara islands and the Natuna Selatan islands. Government Regulation No. 61 is adopted pursuant to the Act on Indonesian Waters No. 6 of 8 August 1996, which revoked previous Law No. 4 of 18 February 1960. The Act on Indonesian Waters of 1996 changed some of Indonesia's archipelagic baselines but, unlike its predecessor, did not provide a list of coordinates; it only included a provisional illustrative map valid until maps with adequate scale and lists of geographical coordinates were made available. While most of the archipelagic baselines defined in Law No. 4 of 18 February 1960 remained unchanged by the Act on Indonesian Waters of 1996, those around the Natuna Sea were modified. Thus, the archipelagic status of the waters in the Natuna Sea was indicated for the first time, in the map attached to Law No. 6 of 1996. Because of one of Indonesia's archipelagic sea lanes proposed for adoption at the International Maritime Organization, in accordance with article 53, paragraph 9, of UNCLOS, was passing through the waters of the Natuna Sea, it was necessary to issue the new coordinates of points for that part of Indonesia's archipelagic waters. The archipelagic sea lanes proposed by Indonesia were approved by IMO in May 1998. (The text of Government Regulation No. 61 will be published in Law of the Sea *Bulletin No. 38.*)

90. China on 26 June 1998, adopted the Law of the People's Republic of China on the Exclusive Economic Zone and the Continental Shelf. The Law establishes the legal framework for these two areas, which will be developed according to regulations. (The Law will be published in Law of the Sea *Bulletin No. 38.*)

91. On 6 August 1998, Viet Nam transmitted a note verbale to the Secretary-General of the United Nations stating its position regarding the Law on the Exclusive Economic Zone and the Continental Shelf of the People's Republic of China adopted on 26 June 1998. The note, *inter alia*, makes reference to article 2 of the Law which declares that the exclusive economic zone and the continental shelf of China are to be measured from baselines established by China. In this respect, Viet Nam reaffirmed its position that the Declaration of the Government of the People's Republic of China on the Baselines of the Territorial Sea of the People's Republic of China of 15 May 1996, which includes baselines for the Hoang Sa archipelago, "is not in conformity with international law" and "constitutes a serious violation of the Vietnamese territorial sovereignty" and, therefore, is "null and void" since the archipelago is, according to the note, part of Vietnamese territory. At the request of the Government of Viet Nam, the protest was circulated to all States Members of the United Nations (LOS/1 dated 17 August 1998) and will be published in Law of the Sea *Bulletin No. 38*.

92. Cambodia on 28 May 1998 transmitted to the United Nations a note verbale concerning the position of the Government of Cambodia on the delimitation of the maritime boundary between the Kingdom of Thailand and the Socialist Republic of Viet Nam, signed at Bangkok on 9 August 1997. The note points out, *inter alia*, that Cambodia has never accepted the maritime delimitation proclaimed by Thailand and Viet Nam and that the latter constitutes a violation of Cambodia's sovereignty and its rights in its exclusive economic zone and on its continental shelf in "this part of the Gulf of Thailand". Accordingly the maritime delimitation is without prejudice to and does not affect the rights and legitimate interests of Cambodia in the area in question and Cambodia totally reserves its position in relation to any existing maritime delimitation in that part of the Gulf of Thailand or to be made in the future without the agreement of the Government of Cambodia. (See Law of the Sea *Bulletin No. 37.*)

3. Latin America and the Caribbean

93. Panama on 10 February 1998 promulgated the Decree-Law No. 7 "Creating the Maritime Authority of Panama". The Maritime Authority of Panama, as defined in article 1, is an autonomous public body with legal personality, its own assets and independence concerning internal arrangements. The decree provides, *inter alia*, that the objectives of the Authority are the implementation of the National Maritime Strategy of Panama; the coordination of its activities with national maritime institutions and authorities, such as the Panama Canal Authority; and functioning as the supreme maritime authority of the Republic of Panama in the exercise of the rights and discharge of the responsibilities of Panama under UNCLOS. The Decree-Law, which defines in detail the composition, appointment of officials and functions of all institutions, bodies and offices under it and provides how the Authority's assets and finances will be controlled, constitutes a very positive effort to establish a coordinated

and integrated approach in dealing with all sectors relating to marine affairs. (See Law of the Sea *Bulletin No. 37*.)

4. Europe and North America

94. On 27 March 1998, Monaco promulgated Law No. 1,198 instituting the "Code de la Mer". The Code deals both with matters pertaining to the international law of the sea, such as the legal regime of maritime areas, and with maritime law, such as shipping and navigation, and follows the integrated approach provided by the Convention. (The Code will be published in Law of the Sea *Bulletin No. 38*.)

95. Bulgaria and Turkey concluded an Agreement on the Determination of the Boundary in the Mouth of the Rezovska/Mutludere River and Delimitation of the Maritime Areas between the two States in the Black Sea, signed at Sofia on 4 December 1997. The Agreement has settled the following issues: establishment of the terminal land boundary point and starting point of the maritime boundaries between the two countries; delimitation of the territorial sea between Bulgaria and Turkey up to a distance of 12 nautical miles; and delimitation of the continental shelf and exclusive economic zone between the two countries up to the existing Turkish-Russian Federation continental shelf/exclusive economic zone boundary. (The Agreement will be published in Law of the Sea *Bulletin No. 38*).

96. A joint statement contained as an annex to a letter from the Permanent Representatives of both Bulgaria and Turkey to the United Nations was communicated to the Secretary-General on 20 January 1998 (A/52/774) regarding the above-mentioned Agreement between the two countries. The joint statement points out that the question of the delimitation of the territorial sea, the exclusive economic zone and the continental shelf between Bulgaria and Turkey had been pending for over 40 years and had been the subject of many bilateral meetings since 1964. The statement stresses that the development of Bulgarian-Turkish relations, already at a very positive stage, would receive a new impetus with the resolution of this long-standing issue. Furthermore, the signing of this Agreement was, according to the joint statement, "ample proof that long-standing bilateral problems can be resolved by utilizing the negotiation process envisaged, among other things, as the initial means of peaceful settlement in the Charter of the United Nations". (See Law of the Sea *Bulletin No. 36*).

97. Spain on 9 June 1998 transmitted for deposit with the Secretary-General the list of geographical coordinates of points for the drawing of the limits of the fisheries protection zone in the Mediterranean Sea established by Royal Decree 1315/1997 of 1 August 1997. Except for two points south of Cabo de Gata, all points deposited are equidistant from the coasts of Spain and those of neighbouring countries with opposite coasts (Royal Decree 1315/1997 of 1 August has been reproduced in Law of the Sea *Bulletin No. 36*. The list of geographical coordinates of points is published in Law of the Sea *Bulletin No. 37*). **France** has protested the limits of the fisheries protection zone established by Spain in the Mediterranean Sea. (The text of the protest will be published in Law of the Sea *Bulletin No. 38*).

B. Summary of national claims to maritime zones

98. Compliance of States with the provisions of the Convention regarding the establishment of the outer limits of maritime areas is very high. The summary of national claims to maritime zones and developments since last year's report only confirms this trend.

99. After Nigeria's amendment of its legislation, only 11 States out of 145 continue to claim a territorial sea extending beyond 12 nautical miles. Of these, 8 States claim 200 nautical miles – 5 in Africa and 3 in Latin America. One Latin American State, a non-party to the Convention, claims a single 200-nautical-mile area called a "maritime domain" expressly recognizing freedoms of navigation and overflight beyond 12 miles. For this reason, the maritime area of that State is listed in a separate category under "others" instead of being classified as a territorial sea extending beyond 12 nautical miles. There is only one State claiming a contiguous zone extending beyond 24 miles (35 nautical miles).

100. As regards the breadth of exclusive economic zones and fishery zones, the practice of States shows a total compliance with the provisions of the Convention. Some States combine exclusive economic zones with fisheries zones, while others have one or the other depending on different circumstances. Concerning fisheries zones, the table only reflects the States which do not have exclusive economic zones and whose fisheries zones extend beyond the limits of their territorial sea. Many States (25) continue to maintain their old legislation on the continental shelf, which includes the definition contained in the 1958 Geneva Convention. Of the 23 States which do not define the limits of their continental shelf either by reference to the criteria established in the Convention or those of the 1958 Continental Shelf Convention, only two are not in conformity with article 76 of the 1982 Convention.

Summary of claims to maritime zones[a]

Maritime zone	*Outer limit*	*African States*	*Asian and Pacific States*	*European and North American States*	*Latin American and Caribbean States*	*Total*
Territorial sea	12 M or less	30	46	30	27	133
	More than 12 M	7	1	—	3	11
Contiguous zone	24 M or less	16	24	10	16	66
	More than 24 M	—	1	—	—	1
Exclusive economic zone	200 M or less (up to delimitation line, median line, determination by coordinates, etc.)	25	36	19	26	106
Fishery zone	200 M or less	5	3	6	1	15
Continental shelf	200 M and/or outer edge of continental margin (UNCLOS)	9	17	4	13	43
	Depth 200 metres and/or exploitability (1958 Convention)	4	8	10	3	25
	Others (natural prolongation, no definition provided, etc.)	2	6	8	7	23
Other maritime areas	200 M	—	—	—	1	1

[a] Data available for all coastal States except Bosnia and Herzegovina, Georgia and Slovenia.

M = nautical mile.

C. Deposit of charts and lists of geographical coordinates and compliance with the obligation of due publicity

1. Deposit and due publicity of charts and lists of geographical coordinates relating to straight baselines, archipelagic baselines and various maritime areas

101. Under articles 16 (2), 47 (9), 75 (2) and 84 (2) of the Convention, the coastal State is required to deposit with the Secretary-General its charts or lists of geographical coordinates for the drawing of straight baselines and archipelagic baselines and those showing the outer limits of the territorial sea, the exclusive economic zone and the continental shelf. Coastal States are also required to give due publicity to all these charts and lists of geographical coordinates. Similarly, under article 76, paragraph 9, the coastal State is further required to deposit with the Secretary-General charts and relevant information permanently describing the outer limits of its continental shelf extending beyond 200 nautical miles. In this case, due publicity is to be given by the Secretary-General.

102. The Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs, as the responsible unit of the Secretariat, has established facilities for the custody of charts and lists of geographical coordinates to be deposited in accordance with the Convention. The Division has also adopted a system for their recording in order to assist States in fulfilling their obligations of giving due publicity to such charts and lists of coordinates. A computerized "data record" summarizes the information submitted, and to ensure publicity, the Division informs States parties to the Convention of the deposit of charts and geographical coordinates through a "Maritime Zone Notification". Such information is included in the Law of the Sea *Information Circular* (LOSIC) distributed to all States. As of 30 September 1998, the following States parties have deposited with the Secretary-General charts and/or lists of geographical coordinates relating to straight and archipelagic baselines and various maritime zones: Argentina, China, Costa Rica, Cyprus, Finland, Germany, Italy, Jamaica, Japan, Myanmar, Norway, Romania, Sao Tome and Principe, and Spain.

103. Since last year's report, the following States have deposited charts and/or lists of coordinates with the Secretary-General: Japan (charts showing the straight baselines and outer limits of some parts of the territorial sea); Sao Tome and Principe (lists of geographical coordinates for the drawing of archipelagic baselines and

outer limits of the exclusive economic zone, and a chart showing various maritime zones); and Spain (list of geographical coordinates for the drawing of the limits of the fisheries zone in the Mediterranean Sea).

104. The Division for Ocean Affairs and the Law of the Sea has established a Geographic Information System (GIS) database using key technology to convert deposited information such as maps, charts and lists of coordinates in one global GIS database. The GIS database enables the Division to convert geographical data submitted in the form of a chart. In cases where States parties submit charts, GIS has been used to simply reproduce the geographic features from the chart in digital format, link them with the database containing corresponding data (geographical coordinates, description, etc.) and design an output incorporating suitable cartographic symbols. More often States parties submit only geographical coordinates. In such cases the GIS has been used to convert submitted data into a suitable format to enter into the database, display the coordinates on a map and construct the feature they represent (point, line or polygon). This process enables the Division to respond to frequent requests for charts illustrating these geographical data at the national, regional or global level. It is also a tool which enables the Division to verify the accuracy of the information submitted. The GIS database is connected with the National Legislation database in the Division which enables the Division to access other relevant information linked to certain geographic features.

2. Other due publicity obligations established by UNCLOS

105. The Division has also sought to assist States in the fulfilment of their other obligations of due publicity established by the Convention. These obligations relate to all laws and regulations adopted by the coastal State relating to innocent passage through the territorial sea (article 21 (3)); all laws and regulations adopted by States bordering straits relating to transit passage through straits used for international navigation (article 42 (3)); the designation of sea lanes and prescription of traffic separation schemes, and their substitution, in the territorial sea and straits used for international navigation (articles 22 (4) and 41 (6)); as well as the designation of sea lanes through archipelagic waters and the prescription of traffic separation schemes, and their substitution (article 53 (7) and (10)). A number of States parties have submitted information related to their obligations of due publicity and this information is provided in the Law of the Sea Information Circular. In addition, assistance to States concerning their obligations of due publicity regarding sea lanes and traffic separation schemes is conducted in cooperation with IMO.

106. Although no State submitted new information regarding articles 21, 22, 41, 42 and 50 of the Convention since last year's report, the Permanent Representative of Mexico to the United Nations on 3 June 1998 requested the Secretary-General to publish information relating to a temporary suspension of the innocent passage in specified areas of the territorial sea of Mexico, in accordance with article 25, paragraph 3, of the Convention. The Secretary-General on 5 June 1998 circulated document T.S.N. 1. 1998, informing all Member States of said suspension of innocent passage by Mexico.

IV. States with special geographical characteristics

A. Small island States

107. Problems and special needs of small island developing States continued to be discussed within the context of chapter 17 of Agenda 21 and, in particular, the Barbados Programme of Action for the Sustainable Development of Small Island Developing States. Their implementation was reviewed and other related issues addressed during the sixth session of the Commission on Sustainable Development. The report of the Secretary-General on the progress in the implementation of the Barbados Programme of Action (E/CN.17/1998/7 and Add.1–9), submitted to that session, focused, among other things, on concerns of small island developing States with regard to climate change and sea level rise. According to the report, climate models forecasted the best estimate value of sea level rise to be about 50 cm over the next century (with a range of 13 to 94 cm), taking into account water expansion attributable to heating and glacial and polar melting.

108. The report also noted that the marine ecosystems and biodiversity of small island developing States were especially susceptible to damage, including destruction of coral reefs by fisherfolk or tourists; pollution, sedimentation and land reclamation; natural disasters; conversion of mangroves and wetlands resulting in loss of important nursery areas; use of large-scale pelagic driftnets which impact marine mammals, turtles, birds and non-targeted fish; and overfishing in general. It pointed out that coastal fisheries in small island developing States, once abundant, had become scarce owing to overfishing by both artisanal and small-scale commercial fishing activity. Inadequate

monitoring made it difficult to quantify the overall damage to marine life from such activities.

109. The report sought to identify actions that had been taken nationally, regionally and globally to respond to such problems. It also provided information on initiatives and activities of the United Nations agencies to help small island developing States, as well as recommendations for future action.

110. The decision of the Commission on Sustainable Development on small island developing States[8] covered, *inter alia*, climate change and sea-level rise, management of wastes, freshwater resources and their vital link to the management of coastal and marine resources and waste, and biodiversity resources. The Commission pointed out the well-recognized vulnerability of small island developing States to global climate change and the likelihood that the accompanying sea level rise would have severe and negative effects on their environment and biological diversity. It noted that waste and pollution from ships, in particular the potential for major oil spills, represented an important concern for such States. The Commission proposed that the international community, in collaboration with regional organizations and institutions, should provide effective support for international and regional initiatives to protect small island developing States from ship-borne wastes and pollution, including the development of facilities for receiving ship-borne waste in ports.

111. The Commission noted that there was a critical need for further scientific and technical studies and research on the climate change phenomenon and its impacts on small island developing States and called upon the international community to continue to undertake and to assist small island developing States in such studies and research. Regarding the unique and extremely fragile biological diversity, both terrestrial and marine, in small island developing States, the Commission acknowledged the necessity for further action at all levels to fully implement the Barbados Programme of Action and the Convention on Biological Diversity and encouraged small island developing States to adopt effective conservation measures for the protection of biological diversity, with particular emphasis on management and effective monitoring and control of deforestation, unsustainable agricultural practices and overfishing.

112. With respect to the constraints arising from the small size and environmental fragility of small island developing States, as well as the incidence of natural disasters and the consequent relationship of those constraints to economic vulnerability, the Commission took note of the report of the ad hoc expert group meeting on vulnerability indices for such States.[9] In this respect, the Commission also recalled several General Assembly resolutions (resolutions 52/202 and 52/210 of 18 December 1997; and 51/183 of 16 December 1996), in which the Assembly had requested the Committee for Development Planning to formulate its views and recommendations on the report to be prepared by the Secretary-General on the vulnerability index for small island developing States, and to submit those views through the Economic and Social Council to the General Assembly at its fifty-third session.

113. The Global Environment Outlook project, which was initiated in January 1998, was designed to address specific priorities and needs of the small island developing States of the Caribbean, Indian Ocean and the South Pacific. UNEP is coordinating efforts with the aim of producing, with the support of the European Commission, joint state-of-the-environment assessment reports for the three regions. These reports would help to identify regional environmental concerns, priorities and policies, particularly addressing policy issues of relevance to the Lomé 2000 negotiations.

114. As reaffirmed by the General Assembly in its resolution 52/202, a two-day special session of the Assembly is to be convened in 1999 for an in-depth assessment and appraisal of the implementation of the Barbados Programme of Action.

B. Landlocked and geographically disadvantaged States

115. In its resolution 52/183 of 18 December 1997, entitled "Specific actions related to the particular needs and problems of landlocked developing countries", the General Assembly reaffirmed the right of access of landlocked developing countries to and from the sea and freedom of transit through the territory of transit States by all means of transport, in accordance with international law, in particular Part X of the Convention, and also reaffirmed that transit developing countries had the right to take all measures necessary to ensure that the rights and facilities provided for landlocked developing countries in no way infringed upon their legitimate interests. It further called upon landlocked developing countries and their transit neighbours to implement measures to strengthen further their cooperative and collaborative efforts in dealing with transit issues, *inter alia*, by improving the transit transport infrastructure facilities and bilateral and subregional agreements to govern transit transport operations, developing joint ventures in the area of transit transport and strengthening institutions and

human resources dealing with transit transport. The Assembly appealed once again to all States, international organizations and financial institutions to implement, as a matter of urgency and priority, the specific actions related to the particular needs and problems of landlocked developing countries agreed upon in the resolutions and declarations adopted by the General Assembly and the outcomes of recent major United Nations conferences relevant to landlocked developing countries, as well as in the Global Framework for Transit Transport Cooperation between Landlocked and Transit Developing Countries and the Donor Community.

116. The General Assembly also requested the Secretary-General to convene in 1999 another meeting of governmental experts from landlocked and transit developing countries and representatives of donor countries and financial and development institutions to review progress in the development of transit systems, including sectoral aspects as well as transit transportation costs, with a view to exploring the possibility of formulating necessary action-oriented measures.

117. In its resolution 52/26 on oceans and the law of the sea, the General Assembly requested the Secretary-General to continue preparing periodically special reports on specific topics such as, *inter alia*, transit problems of the landlocked developing States. In this connection, it is noted that the Division for Ocean Affairs and the Law of the Sea is in the process of collecting from landlocked States texts of bilateral and/or subregional agreements or treaties in force relating to the access to and from the sea and freedom of transit with a view to producing a comprehensive study on the subject. Several Governments have already responded and the following agreements or treaties have been received: Conventions of 1868 and 20 November 1963 concerning navigation on the Rhine; bilateral agreements between Ethiopia and Djibouti of 12 December 1993, as well as between Ethiopia and Eritrea of 27 September 1993 on transit and port services; treaties between Austria and Italy of 1934, 1955 and 1985 concerning the development of Austrian trade through the port of Trieste and the use of that port; and the Treaty on transit between Nepal and India of 1991, including a 1996 Protocol to that Treaty; operating modalities agreed upon between Nepal and India in 1997 for additional transit routes from Nepal to Bangladesh; and transit Agreement of 1976 between Nepal and Bangladesh, together with a Protocol to that Agreement. However, additional input is needed to produce a study adequately illustrating current State practice in various regions in respect of terms and modalities of transit and access to and from the sea by landlocked States.

V. Peace and security

A. Combating crimes at sea

118. The escalation and global reach of organized crime has affected all modes of transport, especially maritime transport, which constitutes one of the preferred modes for smuggling illicit goods, such as narcotic drugs, and persons from one country to another, since it is less detectable than other methods and permits the shipment of large quantities and numbers in one consignment.

119. Another form of crime about which the shipping industry has been particularly concerned is piracy and armed robbery. The increase in the number of incidents, in particular considering that a great number go unreported, and the violence of some attacks require urgent attention.

120. The paucity of trained personnel, the scarcity of modern equipment, the obsolescence of much national legislation, as well as the weak maritime law enforcement capability of many States have rendered them unable to deal with crimes at sea.

121. Efforts by the international community have been intensifying in the search for ways and means of strengthening and improving national capabilities and international cooperation against transnational organized crime and of laying the foundations for concerted and effective global action against such crime and the prevention of its further expansion.

122. The Economic and Social Council, at its substantive session in July 1998, approved for adoption by the General Assembly a resolution which provides for the establishment of an open-ended intergovernmental ad hoc committee for the purpose of elaborating a comprehensive international convention against transnational organized crime. It also provides for the elaboration, as appropriate, of international instruments addressing trafficking in women and children, combating the illicit manufacturing of and trafficking in firearms, their parts and components and ammunition, and illegal trafficking in and transporting of migrants, including by sea. An informal preparatory meeting of the ad hoc committee was held at Buenos Aires from 31 August to 4 September 1998, in order to enable the continuation of the work on the elaboration of a convention, which had already been begun by an open-ended intergovernmental group of experts in February 1998.[10]

123. Recent developments in strengthening international and regional cooperation and national capabilities in the

suppression and combating of some of the major crimes at sea are described below.

1. Illicit traffic in narcotic drugs and psychotropic substances

124. There are no "safe" shipping routes where operators can be quite certain that there are no illicit substances on their ships. Direct sailings from countries of supply to countries of consumption are clearly considered as a risk and receive special attention from customs authorities. However, increasing quantities of drugs are also being moved by circuitous routes, using ports in countries that are not drug producers. Drug traffickers believe that by using these ports they invite less risk of interception in countries of destination.

125. Article 108 of the Convention and article 17 of the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances provide the legal framework governing international cooperation in the suppression of illicit traffic of these substances by sea.

126. The need to effectively implement article 17 and thereby strengthen international, regional and bilateral cooperation in the suppression of illicit traffic in narcotic drugs and psychotropic substances has been emphasized in the past by the Commission on Narcotic Drugs and the Working Group on Maritime Cooperation (see A/50/713, paras. 156–160). It was most recently underscored by the General Assembly in resolution S-20/4 on "Measures to enhance international cooperation to counter the world drug problem", which the Assembly adopted at its twentieth special session devoted to combating the world drug problem (8–10 June 1998). Part C (Measures to promote judicial cooperation), section VI of the resolution, addresses "illicit traffic by sea" and recommends that States, *inter alia*, negotiate and implement bilateral and multilateral agreements to enhance cooperation in combating the illicit drug traffic by sea in accordance with article 17 of the 1988 Convention; promote regional cooperation in maritime drug law enforcement by means of bilateral and regional meetings; cooperate with other States through multilateral training seminars; and promote common maritime law enforcement procedures through the use of the maritime drug law enforcement training guide of the United Nations International Drug Control Programme (UNDCP).

127. In the same resolution, the General Assembly also recommended that States review communication channels and procedures between competent authorities to facilitate coordination and cooperation to ensure rapid responses and decisions, and provide training to law enforcement personnel in maritime drug law enforcement, including the identification and surveillance of suspicious vessels, procedures for boarding, searching techniques and drug identification.

128. Addressing also the need to improve national capabilities, the General Assembly recommended that States review their national legislation to ensure that the legal requirements of the 1988 Convention were met, for example, the identification of competent national authorities, the maintenance of ship registries and the establishment of adequate law enforcement powers. While the resolution makes no reference to the Convention on the Law of the Sea, it may be noted that article 94 of the Convention requires every State to effectively exercise its jurisdiction and control over ships flying its flag, and in particular to maintain a register of ships.

129. UNDCP has been actively engaged in facilitating the implementation of article 17 of the 1988 Convention. It is undertaking a pilot project on maritime drug law enforcement training and model legislation, which involves strengthening regional cooperation. The training guide for law enforcement officers engaged in the prevention of illicit drug-trafficking by sea, which was referred to by the General Assembly, was developed at two meetings of experts on maritime drug law enforcement training held in October 1996 and January 1997, and was tested at the UNDCP Asia-Pacific Training Seminar on Maritime Drug Law Enforcement in October 1997.

130. UNDCP has recently established an Informal Correspondence Group on Maritime Drug Control Model Legislation to assist in assembling materials that might form a useful basis for model legislation to assist States in implementing their obligations under article 17. The Division for Ocean Affairs and Law of the Sea is a member of the Group.

131. Other efforts by UNDCP to strengthen regional cooperation include the joint project with IMO in the Latin American and Caribbean region, aimed at developing a model training course on combating illicit trafficking by sea.

132. Developments in other forums to strengthen international cooperation in the suppression of illicit drug-trafficking include the adoption by the IMO Assembly at its twentieth session of guidelines for the prevention and suppression of the smuggling of drugs, psychotropic substances and precursor chemicals on ships engaged in international maritime traffic (Assembly resolution A.892(20)). The guidelines consist of two chapters: chapter I, "Prevention of illicit drug trafficking", contains a customs procedure to be conducted in cooperation with the

crew and shipping companies on precautions and safety measures to prevent drug trafficking. It also sets out the duties of the operating companies and their staff working on board and ashore in relation to preventing drug trafficking. The chapter lists methods to reduce the possibility of hiding drugs and illegal substances and sets out methods of detecting drugs possibly hidden in the cargo areas of ships. The guidelines recommend checks on personnel on board the ship and controls on people boarding or leaving the ship. It lists areas where drugs may be concealed and notes areas where drugs have been found on board ships.

133. Chapter II, "Control of the transport of chemical products either essential for drug manufacture or precursors", sets out precautions to be taken by customs authorities in ports when these substances are carried and recommends setting up controls that will provide exact details of the destination and distribution of the products.

2. Illegal trafficking in and transporting of migrants by sea/smuggling of aliens

134. The illegal trafficking in and transporting of migrants, otherwise referred to as the smuggling of aliens, constitutes a reckless exploitation of people in distress, and thus is a particularly reprehensible form of international organized crime. It endangers the lives of the individuals who are being smuggled, while the perpetrators earn profits and escape justice.

135. Usually the ships, many of them converted fishing vessels, that are used for illegally transporting migrants are not seaworthy, dangerously overcrowded and otherwise unsafe. Many of these vessels are without nationality.

136. The measures which coastal States can take under the Convention to suppress this type of criminal activity include: exercising criminal jurisdiction on board a foreign ship passing through the territorial sea (article 27); punishing in the contiguous zone the infringement of immigration laws and regulations committed within a State's territory or territorial waters (article 33); exercising the right of hot pursuit of a foreign ship which has violated the immigration laws and regulations of the State (article 111); exercising the right of visit where a ship is without nationality or conceals its true nationality (article 110); and enforcing the relevant provisions of the Convention in respect of seaworthiness.

137. There are many aspects to the problem of illegal transport of migrants by sea, including human rights concerns, women and children's rights, refugee questions and migration. In addition, there are potentially several countries involved: the State or States where the smuggling scheme was planned, the State of nationality of the person smuggled, the flag State of any vessels that transport the illegal migrant, States through which the illegal migrants transit to their destination or in order to be repatriated, and the State of destination. Another affected State can also be the flag State of a vessel which might be called upon to rescue and to provide medical care, food and transportation to illegal migrants found in distress at sea.

138. Some destination States, in particular, have called for the elaboration of an international instrument to enhance international cooperation; the text of a draft convention against the smuggling of illegal migrants and a draft protocol aiming at combating the trafficking and transport of migrants by sea was submitted by Austria and Italy to the Commission on Crime Prevention and Criminal Justice at its seventh session.[11] Upon the recommendation of the Commission, the Economic and Social Council recently decided that discussions on the elaboration of an international instrument against illegal trafficking in and transporting of migrants, including by sea, should be carried out by the ad hoc committee on the elaboration of a comprehensive international convention against transnational organized crime (see para. 122).

139. The call for an international convention was also made by Italy in the Legal Committee of IMO, to which it submitted a proposal for a multilateral convention to combat illegal migration by sea (LEG 76/11/1). The Committee decided that, although there had been significant support for the proposal, it might be more prudent to await the outcome in other forums before the item was placed on the agenda of the Committee. It was suggested to raise the matter in the IMO Assembly. (See report of the 76th session of the Legal Committee, October 1997, LEG 76/12, paras. 131–137.)

140. In resolution A.867(20) on combating unsafe practices associated with the trafficking or transport of migrants by sea, which was adopted by the IMO Assembly at its twentieth session, the Assembly noted with concern the incidents involving the loss of life resulting from the use of substandard ships for the transport of migrants and noted that work was being carried out in this field by the Commission on Crime Prevention and Criminal Justice. It invited Governments to cooperate and increase their efforts to suppress unsafe practices associated with the trafficking and transport of migrants by sea, and to collect and disseminate information about the practice to IMO and to the Governments that might be affected. Furthermore, Governments were requested to detain all unsafe ships and report pertinent information to IMO. In the resolution, IMO is directed to consider the practice from the point of view of safety of life at sea, and is requested to ensure that it participates in the preparation of any draft convention or

other instrument on the subject. It is also requested to bring to the attention of the United Nations the recommendation that an international convention be concluded aimed at combating the trafficking or transport of migrants by sea.

141. At its sixty-ninth session, the Maritime Safety Committee (MSC) of IMO was invited to consider draft guidelines for the prevention and suppression of unsafe practices associated with the trafficking or transport of migrants by sea proposed by Italy (MSC 69/WP.1; this document revoked MSC 69/21/2). The informal group established to give initial consideration to the proposal noted, *inter alia*, that a contribution from IMO would facilitate the work of the United Nations ad hoc committee and that such a contribution should be limited to developing provisional elements on combating unsafe practices associated with the trafficking or transport of migrants by sea.

142. MSC agreed to establish a correspondence group on this issue to work inter-sessionally under the lead of the United States of America to further develop these provisional elements and to report to the Committee at its seventieth session; invited member Governments to submit any comments on these elements to the correspondence group; instructed the IMO secretariat to attend the meeting in Buenos Aires (see para. 122) and to report the outcome to MSC at its seventieth session; and to continue the work of the correspondence group at the seventieth session (see MSC 69/22, paras. 21.8–21.15).

3. Terrorism

143. Among the global efforts to combat and suppress international terrorism and terrorist acts, two recent developments can be noted, the adoption by the General Assembly of the International Convention for the Suppression of Terrorist Bombings on 15 December 1997 (resolution 52/164); and the current efforts of the Ad Hoc Committee established by General Assembly resolution 51/210 of 17 December 1996 to draft an international convention on the suppression of acts of nuclear terrorism.

144. The draft convention, submitted by the Russian Federation (A/AC.252/L.3 and Corr. 1 and 2), provides that nothing in the Convention shall affect in any way the rules of international law pertaining to the competence of States to exercise investigative or enforcement jurisdiction on board ships not flying their flag, or on board aircraft not registered in those States (draft article 6, para. 4). The text notes that this provision is based on article 9 of the 1988 Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation.

4. Piracy and armed robbery

145. The continuing increase in acts of piracy and armed robbery against ships and the increasing violence of the attacks are a matter of great concern to the shipping industry. The seriousness of the problems has been brought to the attention of a number of forums, notably IMO, the Meeting of States Parties to UNCLOS and the General Assembly of the United Nations.

146. According to IMO, the number of incidents of piracy and armed robbery against ships which occurred in 1997 was 252, an increase of 24 over the 1996 figure: the total number of such acts reported since 1984 amounted to 1,207. The areas most affected by pirates and armed robbers continued to be the same areas, i.e., the South China Sea, Strait of Malacca, Indian Ocean, East and West Africa and South America. Most of the attacks were reported to have occurred in territorial waters, while the ships were at anchor or berthed, and in many cases violence was used against the crew. According to the annual report of the International Maritime Bureau of the International Chamber of Commerce on piracy and armed robbery, during 1997, 51 crew members were killed, 30 were injured, 22 assaulted, 116 threatened and 412 were taken hostage. Indonesia is the area of highest risk with 47 attacks reported in 1997. Thailand ranked second with 17 attacks reported, and Brazil and the Philippines ranked third with 15 attacks reported.

147. The International Maritime Bureau and the International Transport Workers' Federation (ITF) believe that the official reports account only for 50 per cent of the attacks, because shipowners are hesitant to report an incident for fear of having their ships immobilized during an inquiry (which could cost them up to $10,000 a day) and could also result in the loss of clients. The insurance companies settle cases discreetly and simply increase premiums in high-risk regions.

148. At the sixty-ninth session of the Maritime Safety Committee, a number of delegations spoke of the difficulty of conducting investigations into incidents reported in their waters because the reports arrive long after the incidents have occurred. They suggested that the masters of ships should be instructed to report incidents promptly to the competent authorities of the coastal States concerned so that action might be taken in an efficient manner.

149. In some cases there is a lack of financial resources and, as pointed out by the shipping industry, a lack of political will on the part of some coastal States concerned,[12] to combat piracy and armed robbery in their territorial sea. Recent initiatives to address this problem have included the

decision by IMO to send missions of experts to those countries where acts of piracy and armed robbery have most frequently been reported in order to further discuss the implementation in those countries of the IMO Guidelines for Preventing and Suppressing Piracy and Armed Robbery against Ships. The missions are to be followed up by regional seminars intended to assist Governments and officials in the countries concerned in enhancing their capability for preventing and suppressing such unlawful acts in their waters. The first such seminar is scheduled for Rio de Janeiro in October 1998, the second in Singapore in February 1999.

150. Another suggestion that has been put forward for dealing with the problem of piracy and armed robbery is to update the existing legal definitions of piracy to reflect modern piracy practices.[13] At the eighth Meeting of States Parties to the Convention, the representatives of the Seamens Church Institute and the International Chamber of Shipping called for new mechanisms to be identified to eradicate piracy and armed robbery and for the issue to be kept prominently on the United Nations agenda (SPLOS/31, para. 64).

151. During the debate on the item "oceans and the law of the sea" at the fifty-second session of the General Assembly, the representative of the United States, speaking on the threat of piracy and armed robbery against ships, urged all States to become party to the 1988 Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation and its related Protocol by the year 2000. It has been suggested that since the 1988 Convention requires States parties to make the offences covered by the Convention punishable under their domestic laws and requires them to extradite and submit for prosecution offenders found within their jurisdiction, it provides another more useful vehicle for prosecution than the nineteenth century piracy statutes.

152. Articles 100 to 107 of the Law of the Sea Convention specifically deal with piracy and its repression on the high seas and are practically a verbatim reproduction of articles 14 to 21 of the 1958 Geneva Convention on the High Seas. Other articles of the Convention which are relevant to the subject are articles 110 and 111. The Convention only addresses the repression of acts of piracy which take place on the high seas and, owing to the reference in article 58 (para. 2), those which take place in the exclusive economic zone. Incidents of piracy and armed robbery in the territorial sea or in port areas are perceived as crimes against the State and are thus subject to its national laws. Article 27 gives the coastal State the right to exercise criminal jurisdiction on board a foreign ship passing through the territorial sea to conduct an investigation or to arrest a person if the crime is of a kind to disturb the peace of the country or the good order of the territorial sea.

153. The definition of piracy in article 101 of the Convention applies to acts committed by individuals for private ends against a private ship or aircraft. Acts of piracy for political motives are not covered by article 101 and the requirement that two ships – pirate and victim – be involved also distinguishes piracy from hijacking.

5. Stowaways

154. The Guidelines on the Allocation of Responsibilities to Seek the Successful Resolution of Stowaway Cases, adopted by the IMO Assembly in its resolution A.871(20) of 27 November 1997, define a stowaway as a person who is secreted on a ship or in cargo which is subsequently loaded on the ship, without the consent of the shipowner or the master or any other responsible person, and who is detected on board after the ship has departed from a port and reported as a stowaway by the master to the appropriate authorities.

155. In the absence of an internationally agreed procedure for dealing with stowaways (the 1957 Brussels International Convention relating to Stowaways has not entered into force and it does not appear that it will do so soon), considerable difficulties are being encountered by shipmasters and shipping companies, shipowners and ship operators in disembarking stowaways from ships into the care of the appropriate authorities.

156. The IMO Guidelines provide practical guidance on procedures to be followed by all the authorities and persons concerned in order that the return and repatriation of a stowaway may be achieved in an acceptable and humane manner. The Guidelines establish the responsibilities of the master, of the shipowner or operator, the country of the first scheduled port of call after discovery of the stowaway (port of disembarkation), the country of the original port of embarkation of the stowaway (i.e., the country where the stowaway first boarded the ship), the apparent or claimed country of nationality/citizenship of the stowaway, the flag State of the vessel and of any countries in transit during repatriation.

157. Governments are urged to deal with stowaway cases in a spirit of cooperation with other parties concerned, on the basis of the allocation of responsibilities set out in the Guidelines.

158. The Facilitation Committee of IMO has been requested to monitor the effectiveness of the Guidelines and to take

such further action, including the formulation of a relevant binding instrument, as may be considered necessary in the light of developments.

159. It is important that stowaway incidents be dealt with humanely by all parties involved and that incidents where individuals perceived to be stowaways are killed on board ships or thrown overboard do not occur, as pointed out during the debate on oceans and the law of the sea at the fifty-second session (see para. 206).

B. Settlement of disputes

160. The Convention requires that States parties shall settle any dispute which may arise between them concerning the interpretation or application of its provisions by peaceful means in accordance with Article 2, paragraph 3, of the Charter of the United Nations. The parties to a dispute which is likely to endanger the maintenance of international peace and security shall first seek a solution by negotiations, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of the parties' choice.

161. When parties to a dispute have not reached a settlement by a peaceful means of their own choice, they shall, at the request of one party to the dispute, submit it to the court or tribunal having jurisdiction. States parties to the dispute could choose to submit their dispute to one of the four binding procedures: the International Tribunal for the Law of the Sea; the International Court of Justice; arbitrations and special arbitration, which deals with specific types of disputes. Decisions rendered by a court or tribunal shall be final and shall be complied with by all parties.

162. The following cases involving maritime boundaries and sovereignty are pending before the International Court of Justice:

(a) *Qatar v. Bahrain*, concerning maritime delimitation and territorial questions. By an Order dated 30 March 1998, the Court directed the submission by each of the parties of a reply on the merits by 30 March 1999. Bahrain having challenged the authenticity of 81 documents produced by Qatar, the Court then decided that Qatar should also file an interim report on the question of the authenticity of each of these documents;

(b) *Cameroon v. Nigeria*, concerning a land and maritime boundary dispute between the two countries over the Bakassi peninsula. The Court on 11 June 1998 found that it has jurisdiction to deal with the merits of the case brought before it by Cameroon against Nigeria. It also found that Cameroon's claims were admissible. The Court has decided that, after consultations with the parties, it will fix a time limit for the filing of a Counter-Memorial by the Respondent (Nigeria) since the Applicant (Cameroon) has already filed a Memorial on the merits of the case;

(c) *Islamic Republic of Iran v. United States of America*, concerning the destruction of three offshore oil platforms owned and operated by the National Iranian Oil Company. By an order of 10 March 1998, the Court had held that a Counter-Claim submitted by the United States was admissible and that it formed part of the proceedings. It therefore directed the parties to submit further written pleadings on the merits of their respective claims. The Islamic Republic of Iran was to submit a reply by 10 September 1998 and the United States a rejoinder by 23 November 1999. However, in response to a request by the Islamic Republic of Iran to extend the date to 10 December 1998 for the filing of its Reply, the Court extended the time limits to 10 December 1998 for the filing of a reply by the Islamic Republic of Iran and to 23 May 2000 for the filing of a Rejoinder by the United States;

(d) *Spain v. Canada*, concerning fisheries jurisdiction. The dispute was submitted to the Court by Spain; Canada raised a preliminary objection to the jurisdiction of the Court. Public hearings started on 9 June and ended 17 June 1998. The Court now has to decide whether it has jurisdiction to deal with the merits of the case. The judgment concerning the preliminary objection will be delivered in the autumn.

163. The first case brought before the International Tribunal for the Law of the Sea on 13 November 1997 was submitted by Saint Vincent and the Grenadines against Guinea. The application was brought under article 292 of the Convention concerning the prompt release of the M/V *Saiga*, an oil tanker flying the flag of Saint Vincent and the Grenadines (see paras. 52–54).

164. The territorial dispute between Eritrea and Yemen concerning a number of islands in the Red Sea has been resolved by peaceful means by the tribunal set up to arbitrate it. The tribunal issued its ruling on 9 October 1988 at The Hague and unanimously found that the islands, islets, rocks and low-tide elevations forming the Mohabbakah islands, including but not limited to Sayal islet, Harbi islet, Flat islet and High islet; the islands, islets, rocks and low-tide elevations forming the Haycock Islands; and South-west Rocks islands are subject to the territorial sovereignty of Eritrea. The tribunal also unanimously found that the islands, islets, rocks and low-tide elevations of the Zuqar-Hanish group, the Abu Ali islands, the island of Jabal al-Tayr and

the islands, islets, rocks and low-tide elevations forming the Zubayr group are subject to the territorial sovereignty of Yemen. The tribunal restricted the sovereignty over the groups of islands awarded to Yemen to the perpetuation of the traditional fishing regime in the region, including free access and the enjoyment for the fishermen of both Eritrea and Yemen.

VI. Navigation

A. Safety of ships

1. Ship construction, equipment and seaworthiness

165. The international regulations and standards governing ship construction, equipment and seaworthiness, which States are required to implement in accordance with articles 94, 217 and 219 of UNCLOS, are essentially those contained in the Safety of Life at Sea (SOLAS) Convention and the 1966 Load Lines Convention. There are also a number of codes, recommendations and guidelines which, though not legally binding, have been widely implemented by States.

166. In this regard, States should note that the following instruments entered into force on 1 July 1998:

- The 1994 amendments to the SOLAS Convention (adopted by Conference resolution 1) adding a new chapter IX on the management of the safe operation of ships (the International Safety Management Code (ISM));
- The 1996 amendments to SOLAS Convention (adopted by resolution MSC.47(66)on 4 June 1996), concerning chapter II and the replacement of all of chapter III (life-saving appliances and arrangements) with a new chapter, which makes the Life-Saving Appliance (LSA) Code adopted by resolution MSC.48(66) on 4 June 1996 mandatory on or after 1 July 1998;
- The 1996 amendments to the SOLAS Convention, chapter II (adopted by resolution MSC.57(67)on 5 December 1996) concerning, *inter alia*, the mandatory application of the International Code for Application of Fire Test Procedures (FTP Code) adopted by resolution MSC.61(67) on 5 December 1996;
- The 1996 amendments to the Guidelines on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers (Assembly resolution A.744(18)), adopted by resolution MSC.49(66) on 4 June 1996;
- The 1994 amendments to the International Code for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk (IGC Code)(adopted by resolution MSC.32(63)on 23 May 1994); and the 1996 amendments to the Code adopted by resolution MSC.59(67) on 5 December 1996;
- The 1996 amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) adopted by resolutions MSC.50(66) of 4 June 1996, and MSC.58(67) of 5 December 1996.

167. The following developments have occurred since the publication of last year's report (A/52/487):

Bulk carriers

168. The 1997 Conference of Contracting Parties to SOLAS adopted a new chapter XII, entitled "Additional Safety Measures for Bulk Carriers", which is expected to enter into force on 1 July 1999 under the tacit amendment procedure (see SOLAS/CONF.4/25). The new regulations will apply not only to new bulk carriers, but also to existing ones. This means that ships constructed before 1 July 1999 which do not comply with the appropriate requirements will have to be reinforced, or they may to have to limit either the loading pattern of cargoes they carry or move to carrying lighter cargoes such as grain or timber.

169. The Conference also adopted amendments to the Guidelines on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, which were adopted by the IMO Assembly in its resolution A.744(18) and made mandatory by amendments to SOLAS at a Conference in 1994. The 1997 amendments are aimed at ensuring that surveys of bulk carriers place particular emphasis on the areas susceptible to corrosion and damage.

170. In addition, nine resolutions were adopted by the Conference of Parties to SOLAS. Resolution 6 is aimed at clarifying the definition of bulk carrier in chapter IX of SOLAS, which makes mandatory the application of the ISM Code; and resolution 8 invites MSC to consider further the safety of bulk carriers not already covered by the new chapter XII, e.g., those under 150 metres in length, and to develop a definition of single side-skin construction for bulk carriers.

171. The IMO Assembly at its twentieth session adopted two resolutions relating to bulk carriers: resolution A.862(20), entitled "Code of Practice for the safe loading and unloading of bulk carriers", contains recommendations to provide guidance to shipowners, masters, shippers,

operators of bulk carriers, charterers and terminal operators for the safe handling, loading and unloading of solid bulk cargoes; and resolution A.866(20), entitled "Guidance to ships' crews and terminal personnel for bulk carrier inspections", highlights the principal areas on bulk carriers that are likely to be susceptible to corrosion or damage, in the form of a simple guide aimed at ships' crews and terminal operators.

Oil tankers

172. The Marine Environment Protection Committee (MEPC) of IMO at its fortieth session approved in principle a design concept as being equivalent to the design for oil tankers under regulation 13F(5) of annex I to MARPOL 73/78. The United States announced that it would not allow tanker vessels of the concept design into its ports since the results of its own study on that design concluded that it was not found to be equivalent in strength to double hulls (see MEPC 40/21, para. 3.29).

2. Seafarers' conditions

Manning of ship and training of crew

173. The IMO International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW) and the STCW Code constitute the "generally accepted international regulations, procedures and practices" referred to in article 94, paragraph 5, of the Convention, with which national measures must be in conformity.

174. In that connection, States are reminded that they were required under the STCW Convention to submit to IMO by 1 August 1998 information concerning administrative measures taken to ensure compliance, education and training courses, certification procedures and other factors.

Abandonment of seafarers

175. A great number of seafarers are abandoned every year in ports far from their native country. They are left stranded in a foreign port by the shipowner, without having been paid the wages they were owed and without having been provided with food or other essential provisions for their survival, or the means to return to their homes.

176. Most cases of abandonment occur where a ship has been arrested; after the ship has suffered an accident, e.g., shipwreck, grounding or sinking; or in cases of bankruptcy or insolvency. In cases where a ship has been arrested, the crew are often kept on board to take care of the ship, and often are left to their own devices for survival. They stay on board as long as they can, believing that they will forfeit their claim to wages owed once they leave the ship.[14] The problem of abandonment is not unique to the maritime transport industry, but is also a widespread problem in the fishing industry.

177. The "applicable international instruments" governing labour conditions referred to in the Convention, article 94, paragraph 3 (b), consist of the body of maritime labour standards of the International Labour Organization (ILO) which includes the ILO Conventions on the Repatriation of Seafarers and the Merchant Shipping (Minimum Standards) Convention (No.147). The ILO Conventions on Repatriation have not been widely ratified and therefore it is not clear from the Convention whether a State which is not a party thereto is nevertheless required to take the ILO Conventions into account. It is also not clear from the Convention whether the Merchant Shipping (Minimum Standards) Convention, which has not been ratified by all States but is nonetheless being applied widely, meets the criterion of general acceptability according to article 94, paragraph 5, of the Convention.

178. It has been noted by ILO that, while no specific instrument covers comprehensively the issue of financial security of seafarers in the sense of providing a comprehensive system of compulsory insurance in respect of claims of seafarers or their families for personal injury or loss of life or in respect of abandoned seafarers, ILO instruments have dealt with the matter in the context of insolvency and within the framework of social security provisions, both of which apply to seafarers to the same extent as other workers (see document LEG 77/4).

179. There was widespread agreement at the seventy-seventh session of the IMO Legal Committee on the need to ensure, through the operation of appropriate international instruments, the rights of seafarers to appropriate compensation for loss of life, personal injury and abandonment. [Reference was made to the relatively low degree of acceptance of ILO Conventions providing protection for the rights and interests of seafarers.] It was noted that ILO Convention No. 147, while widely applied, contained only general principles and relied on further legislation for its proper implementation. The Secretary-General of IMO was requested to consult with ILO on the possibility of establishing a joint working group to consider the subject of liability and compensation regarding claims for death, personal injury and abandonment of seafarers (see submissions by the International Confederation of Free Trade Unions (ICFTU) in LEG 77/4/8 and LEG 77/INF.3; and report of the Committee in LEG 77/11, paras. 46–48).

180. At a round table on the repatriation of seafarers held in New York on 8 May 1998, organized by the Seamen's Church Institute of the Center for Seafarers' Rights, a number of recommendations were made to deal with the problem of how to ensure that abandoned seafarers would be repatriated, including the creation of a "safety net" fund, financed by the industry, to repatriate stranded seafarers; and providing port States with certificates of financial responsibility for repatriation.

B. Safety of navigation

181. Chapter V of SOLAS identifies certain navigation safety services which should be provided by the flag State and sets forth provisions governing the operation of ships. On 1 July 1998, the following amendments to chapter V entered into force: (a) the 1994 amendments adopted by annex 2 of resolution MSC.31(63) of 23 May 1994 concerning regulation 3 (Information required in danger messages), regulation 4 (Meteorological services) and regulation 22 (Navigation bridge visibility); and (b) the 1996 amendments adopted by resolution MSC.57(67) of 5 December 1996 concerning the deletion of regulation 15.1.

182. Resolution A.858(20), on procedure for the adoption and amendment of traffic separation schemes, routeing measures other than traffic separation schemes, including designation and substitution of archipelagic sea lanes, and ship reporting systems, adopted by the IMO Assembly at its twentieth session, confirms that the Maritime Safety Committee has the authority to adopt ship routeing measures and ship reporting systems, and amendments thereto.

1. Routes used for navigation

183. At its sixty-ninth session, the Maritime Safety Committee adopted two new traffic separation schemes off the coast of South Africa; and a new scheme, with an associated inshore zone, off the coast of Spain.[15] The latter scheme is located entirely within the territorial sea of Spain, but was nonetheless submitted to IMO for approval by the littoral State so that any appropriate additions or deletions might be adopted by consensus for the benefit of the international maritime community.[16]

184. The Committee also adopted amendments to the deep-water route west of the Hebrides islands and amended the Rules for the Navigation of Laden Tankers around the southern coast of South Africa.[17] All of the adopted routeing measures will be implemented as of 1 December 1998.

Straits used for international navigation

Straits of Malacca and Singapore

185. MSC at its sixty-ninth session adopted five new traffic separation schemes and amended three existing schemes in the straits of Malacca and Singapore, together with two additional deep-water routes, seven precautionary areas, three inshore traffic zones and one area to be avoided.[18] Amendments to the Rules for Vessels Navigating through the Straits of Malacca and Singapore were also adopted by the Committee.[19] The adopted routeing measures will be implemented as of 1 December 1998.

Strait of Bonifacio

186. The routeing measures in the Strait of Bonifacio which were adopted by MSC will be implemented as of 1 December 1998 and consist of a two-way route and two precautionary areas in the approaches to the Strait.[19]

Strait of Dover

187. The Subcommittee on the Safety of Navigation approved for adoption by MSC an area to be avoided lying on the separation line between traffic separation lanes in the Strait of Dover traffic separation scheme.[20]

Strait of Istanbul, the Strait of Çanakkale and the Sea of Marmara

188. The IMO Assembly at its twentieth session took note of a report (A 20/9/Add.1, annex 3) on the review of the operation of the Rules and Recommendations on navigation through and the conditions in the Strait of Istanbul, the Strait of Çanakkale and the Sea of Marmara submitted the Subcommittee on the Safety of Navigation. In its resolution A.859(20), the Assembly welcomed the wish of all to cooperate on the issue. MSC at its sixty-ninth session noted a statement by the delegation of Turkey that its national maritime traffic regulations had been revised and had been submitted to the Government for approval on 24 April 1998[21] and that the requirements and specifications of the proposed modern Vessel Traffic Services have been finalized. It is planned that the complete system would be fully operational in the course of the year 2000 and will completely cover the Strait of Istanbul, the Strait of Çanakkale and the Sea of Marmara (see MSC 69/INF.25).

189. Having noted the statement of Turkey, the Committee instructed the Subcommittee on the Safety of Navigation at its forty-fourth session to commence work on a new report which would cover all the relevant aspects.[22]

Archipelagic sea lanes

190. The Maritime Safety Committee at its sixty-ninth session considered the revised proposal by Indonesia for the designation of archipelagic sea lanes in its archipelagic waters (MSC 69/5/2) and the draft General Provisions for the adoption, designation and substitution of archipelagic sea lanes prepared at the forty-third session of the Subcommittee on the Safety of Navigation (NAV 43/15, annex 4). Comments on the draft General Provisions had been submitted by the International Civil Aviation Organization (ICAO) (MSC 69/5/6); and the International Hydrographic Organization (IHO) had proposed symbology for depicting archipelagic sea lanes on charts (MSC 69/5/10).

191. ICAO expressed its concern that the text as drafted could compromise the safety of international air navigation by permitting the designation of air routes independent of ICAO-approved air routes and by granting IMO jurisdiction over all normal passage routes used for international navigation as well as for overflight.

192. The Committee revised the draft General Provisions for the adoption, designation and substitution of archipelagic sea lanes in order to address, *inter alia*, the concerns expressed by ICAO and the proposed IHO symbology, and then adopted them by resolution MSC.71(69) as an amendment to the General Provisions on Ships' Routeing (resolution A.572(14), as amended) to be incorporated as a new part H in the IMO publication on *Ships' Routeing*.[23]

193. The General Provisions for the Adoption, Designation and Substitution of Archipelagic Sea Lanes provide guidance for the preparation, consideration and adoption of proposals for the adoption, designation and substitution of archipelagic sea lanes. The General Provisions not only incorporate or refer to the provisions of the Convention on the Law of the Sea, but also elaborate on them by introducing a new concept, that of the "partial archipelagic sea lane proposal", in order to accommodate the situation where an archipelagic State, such as Indonesia, is not in a position to propose for designation all of the normal passage routes and navigational channels as required by the Convention. In cases where IMO adopts a partial archipelagic sea lane proposal as a partial system of archipelagic sea lanes, it retains continuing jurisdiction over the process of adopting archipelagic sea lanes until such time that sea lanes, including all normal passage routes, have been adopted. In the meantime, the right of archipelagic sea lanes passage may be exercised through the routes normally used for international navigation.

194. While the Convention refers generally to the right of overflight and the duties of aircraft over archipelagic sea lanes passage, the General Provisions specifically address the duties of civil aircraft engaged in international air navigation, requiring them to use an air route above a designated sea lane in accordance with any relevant requirements of ICAO. The General Provisions also provide that international air traffic services routes above the archipelagic waters to be used by civil aircraft engaged in international air navigation are subject to the approval process of ICAO.

195. Having adopted the procedure for the adoption, designation and substitution of archipelagic sea lanes, MSC then proceeded to the consideration of the revised proposal by Indonesia (MSC 69/5/2). The proposal confirmed that it is a partial archipelagic sea lane proposal and that therefore the right of archipelagic sea lanes passage may be exercised, in accordance with the General Provisions for the Adoption, Designation and Substitution of Archipelagic Sea Lanes, in all other normal passage routes used for international navigation or overflight and all normal navigational channels lying within such routes, including an east-west route and other associated spurs and connectors, through and over Indonesia's territorial sea and its archipelagic waters. The proposal noted that certain coordinates have been amended as a result of consultations with other States and after more careful study of safety of navigation and overflight, and that certain coordinates and axis lines in the Natuna sea presumed the enactment of new baseline legislation. Consequently, the Division for Ocean Affairs and the Law of the Sea was informed by a note verbale, dated 25 June 1998, from the Permanent Mission of Indonesia to the United Nations of the promulgation on 16 June 1998 of Government Regulation No. 61 containing the list of geographical coordinates for the drawing of baselines of the Indonesian archipelago in the Natuna sea. (The list of coordinates will be published in Law of the Sea *Bulletin No. 38*.)

196. MSC agreed with some minor amendments to the description of the proposed partial system of archipelagic sea lanes and, in accordance with the provisions of Assembly resolution A.858(20) (see para. 182 above), adopted the partial system by resolution MSC.72(69).[24] It will be published in the new part H of the IMO publication on *Ships' Routeing*. The system will be implemented not earlier than six months following the date on which the Government of Indonesia designates the sea lanes. Indonesia was requested by IMO to inform it of the enactment of the new baseline legislation.

197. The delegation of Indonesia then informed MSC that associated rules and regulations applicable to archipelagic

sea lanes passage in Indonesian archipelagic waters had been developed on the basis of the pertinent articles of the Convention.

198. Since this was the first time that IMO had adopted a system of archipelagic sea lanes, MSC decided that it was important to explain to mariners the operational significance to the navigation of ships engaged in archipelagic sea lanes passage in waters where archipelagic sea lanes had been designated, and instructed the Subcommittee on the Safety of Navigation to develop a safety of navigation circular, inviting the archipelagic States concerned to participate in this exercise.

199. It was noted in MSC by the delegation of the Philippines that the lessons derived from the process undertaken by IMO to adopt the Indonesian proposal would guide other archipelagic States should they decide to designate their own archipelagic sea lanes in the future. However, that delegation stressed that "the discussions and agreements on the designation of Indonesian archipelagic sea lanes should exclusively apply to those sea lanes only and should not be interpreted as creating a precedent for future applications for the designation of archipelagic sea lanes".[25]

2. Ship reporting

200. MSC at its sixty-ninth session, by its resolution MSC.73(69), adopted mandatory ship reporting systems "in the Straits of Malacca and Singapore" and "in the Strait of Bonifacio", both of which will be implemented as of 1 December 1998. The Subcommittee on the Safety of Navigation approved for adoption by MSC a mandatory ship reporting system in the Strait of Dover.[26]

201. The benefits of implementing a vessel traffic service are that it allows identification and monitoring of vessels, strategic planning of vessel movements and provision of navigational information and assistance. It can also assist in the prevention of pollution and coordination response to pollution incidents. Recognizing that the use of different vessel traffic service procedures may cause confusion to masters of vessels moving from one vessel traffic service to another, the IMO Assembly at its twentieth session by its resolution A.857(20) adopted Guidelines for Vessel Traffic Services (VTS), including Guidelines on Recruitment, Qualifications and Training of VTS Operators, which replace Assembly resolution A.578(14).

202. The IMO Assembly at its twentieth session also revised the 1989 resolution A.648(16) on General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants, to add two new sections to the standard reporting format (Assembly resolution A.851(20)).

203. Furthermore, the Subcommittee on the Safety of Navigation approved two mandatory ship reporting systems to protect a particular species of whale, one off the north-eastern coast and the other off the south-eastern coast of the United States. The latter system would cover the coastal waters within 25 nautical miles along a 90-nautical-mile stretch off the Atlantic coast in Florida and Georgia and would operate from 15 November to 15 April – the calving season for the whales in this area.[27] In its proposal, the United States noted that since 1991, approximately 50 per cent of the recorded whale mortalities of the particular species of whale have been attributed to ships' strikes.

204. Some delegations in the Subcommittee disagreed with the proposal because it would represent the first mandatory reporting scheme for the protection of one particular species from direct physical impact with ships, rather than for the protection of the marine environment from ships.

3. Maritime communication

205. The future of terrestrial-based radio-navigation systems, in view of the development of satellite-based systems, is unclear. The main concern is that while the Global Positioning System (GPS) and the Global Navigation Satellite System (GLONASS) are expected to be fully operational until at least 2010, their availability beyond then is not guaranteed. Recognizing the need for a future system to improve, replace or supplement GPS and GLONASS, which have shortcomings with regard to integrity, availability, control and system life expectancy, the IMO Assembly at its twentieth session adopted resolution A.860(20) on maritime policy for a future global navigation satellite system (GNSS).

4. Responding to emergencies/assistance at sea

206. In the debate on the item "Oceans and the law of the sea" at the fifty-second session of the General Assembly, attention was drawn to incidents where ships flying the flags of some Member States either threw individuals whom they perceived to be stowaways into shark-infested waters, giving them no chance of survival, or set them adrift on rafts on the high seas and left them to their fate, and where ships in the proximity of such unfortunate individuals have refused to render assistance required of them. The delegation expressed the hope that Member States would fully discharge their obligations under articles 94, paragraph 7, and 98 of

UNCLOS and suggested that the outcome of inquiries undertaken within the framework of article 94(7) should be made available by the States parties involved for inclusion in the reports of the Secretary-General on the item.

207. The obligation of ships to render assistance at sea is enshrined in both tradition and in international conventions. States are required by article 98 of the Convention to render assistance to any person found at sea in danger of being lost, to rescue persons in distress and, after a collision, to render assistance to the ship, its crew and its passengers.

208. The SOLAS Convention requires each of its parties "to ensure that any necessary arrangements are made for coast watching and for the rescue of persons in distress round its coasts. These arrangements should include the establishment, operation and maintenance of such maritime safety facilities as are deemed practicable and necessary".

Amendments to the SAR Convention

209. Another important instrument is the International Convention on Maritime Search and Rescue (the SAR Convention), which was adopted in 1979 to address the lack of uniformity in national organizational plans and the lack of agreed and standardized procedures on a worldwide basis. The SAR Convention was aimed at facilitating the development of an international SAR plan, so that, no matter where an accident occurs, the rescue of persons in distress at sea will be coordinated by a SAR organization and, when necessary, by cooperation between neighbouring SAR organizations. This would ensure that there would be no sea area left for which no Government will have accepted responsibility for the coordination of a SAR operation.

210. Since the SAR Convention imposes considerable obligations on its parties, such as setting up the required shore installations, it has not been ratified by as many countries as some other treaties. While the Convention entered into force in 1985, as of 1 May 1998 it had been ratified by only 57 countries, whose combined merchant fleets represented less than 50 per cent of the world tonnage. As a result, the development of SAR plans in the 13 areas of the world's oceans, as required by the SAR Convention, has been relatively slow and by 1995 – 10 years after its entry into force – provisional SAR plans had only been drawn up for nine regions. It was agreed that such problems could best be overcome by amending the SAR Convention.

211. Amendments to the 1979 SAR Convention were adopted by MSC at its sixty-ninth session by resolution MSC.70(69) of 18 May 1998. The amendments, after entering into force would clarify the responsibilities of Governments and put greater emphasis on the regional approach and coordination between maritime and aeronautical search and rescue operations.

212. Work is nearly completed on the establishment of a global SAR plan. The global network is expected to be completed following a Conference for the Indian Ocean countries, scheduled for September 1998.

213. The SAR Convention provides that the delimitation of a search and rescue region is not related to and shall not prejudice the delimitation of any boundary between States. Even though this provision is intended to facilitate the establishment of SAR regions in areas where the States concerned have not yet reached agreement concerning the delimitation of maritime boundaries, some States have experienced difficulties in reaching agreement on the delimitation of an SAR region.

Global maritime distress and safety system

214. While the SAR Convention was developed to provide a global system for responding to emergencies, the Global Maritime Distress and Safety System (GMDSS), which was adopted in 1988 and entered into force in 1992, was established to provide it with the efficient communication support it needs. By 1 February 1999, the GMDSS will become fully operational and all passenger ships and all cargo ships of a gross tonnage of at least 300 on international voyages will be required to carry equipment designed to improve the chances of rescue following an accident, including satellite emergency position indicating radio beacons (EPIRBs) and search and rescue transponders (SARTs) for the location of the ship or survival craft. The GMDSS also provides for urgency and safety communications and the dissemination of maritime safety information, including navigational and meteorological warnings. Although satellites play an important part in the GMDSS, terrestrial radio is still important. Parties to the SOLAS Convention are required to provide appropriate shore-based radio facilities.

Restructuring of Inmarsat

215. The Inmarsat Assembly at its twelfth session in April 1998 approved amendments to the Inmarsat Convention and Operating Agreement to establish the new Inmarsat structure. Under the new structure, the whole of the Inmarsat business would be carried on in the future by a national company, subject to ongoing regulatory oversight by the intergovernmental organization of the performance of certain public service obligations by the company under a Public Services Agreement, which would include an obligation by

the company to continue to provide its existing GMDSS services. The Assembly's decision is subject to affirmative approval, by the Inmarsat Council, of certain commercial documentation and legal conditions precedent to the transfer of business to the company, and the Council was expected to give that approval at its seventy-fourth session in November 1998 (see MSC 69/10/2 and MSC 69/22, para. 10.16).

5. Maritime casualties

216. The information in voyage data recorders on board ships can be used for investigating the cause or causes of an accident. At its twentieth session, the IMO Assembly by resolution A.861(20) adopted Recommendations on Performance Standards for Shipborne Voyage Data Recorders (VDRs), in which Governments are invited to encourage shipowners and operators of ships entitled to fly their flag to install VDRs as soon as possible, considering that the carriage of VDRs may soon be made mandatory under the SOLAS Convention.

217. The Assembly also adopted, by resolution A.849(20), the Code for the Investigation of Marine Casualties and Incidents (see A/52/487, paras. 137–141).

6. Hydrographic survey and charting

218. Article 24, paragraph 2, of UNCLOS refers to the obligation of the coastal State to give appropriate publicity to any danger to navigation of which it has knowledge within its territorial sea. It is therefore an implicit obligation of UNCLOS for States to carry out systematic hydrographic surveys with the accuracy available with present-day technology and to publish nautical charts accordingly. This obligation has been included in draft regulation 9 of the new chapter V of the SOLAS Convention. This new chapter, which addresses many other issues connected with safety on board, requires in-depth examination by IMO and will not be approved before 2002. In the interim, IHO is undertaking technical cooperation activities regarding the matter, involving education and transfer of technology, carried out through bilateral arrangements and with the aid of other international organizations. IHO and IMO have also decided jointly that draft regulation 9 of the new chapter V of the SOLAS Convention be reflected in the General Assembly resolution on the item "Oceans and the law of the sea". Such action will facilitate the work of IHO and IMO to convince Governments of coastal States to discharge their responsibility for surveying and charting waters under their jurisdiction with a view to improving the safety of navigation and the protection of the marine environment.

C. Enforcement

219. With many rules, regulations and standards in place, the emphasis has shifted from the development of new rules to the effective enforcement of those that have already been adopted. The adoption of the International Safety Management (ISM) Code; the establishment of the IMO Subcommittee on Flag State Implementation; the expanded role that has been given to the IMO secretariat in monitoring the implementation of the STCW Convention, and the growing number of Memoranda of Understanding for regional port State control all attest to this change of emphasis.

1. Flag State jurisdiction

220. The primary responsibility for the enforcement of international rules and standards rests with the flag State. Article 94 of UNCLOS requires every State to effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag. Every State is required to take such measures for ships flying its flag as are necessary to ensure safety at sea. In taking these measures, each State is required to conform to generally accepted international regulations, procedures and practices and to take any steps which may be necessary to secure their observance.

221. A major initiative by IMO to improve flag State jurisdiction is the International Safety Management Code which, as of 1 July 1998, has become mandatory for all tankers, bulk carriers, gas carriers, passenger ships and high-speed cargo craft of above 500 gross tons. It will be extended to other ships in 2002. The Code requires a safety management system (SMS) to be established by "the company", which is defined as the shipowner or any person, such as the manager or bareboat charterer, who has assumed responsibility for operating the ship. The SMS in turn should include a number of functional requirements: a safety and environmental protection policy; instructions and procedures to ensure safety and environmental protection; defined levels of authority and lines of communication between and among shore and shipboard personnel; procedures for reporting accidents, etc.; procedures for responding to emergencies; and procedures for internal audits and management review. The company is then required to establish and implement a policy for achieving these objectives. This includes providing the necessary resources and shore-based support. However, the Code stresses that the responsibility for verifying that the Code is implemented rests with the Government.

222. The ISM Code was made mandatory by means of a reference in the new chapter IX to the SOLAS Convention entitled "Management for the safe operation of ships", which was adopted in 1994 and entered into force on 1 July 1998. Chapter IX requires Governments to issue a Document of Compliance to every company that meets the standards laid down in the Code. The document may also be issued by an organization recognized by the Government (or even another Government) and a copy must be kept on board each ship so that it can be produced on request for certification purposes. Ships operated by a company that meets the Code's requirements must also be issued with a Safety Management System Certificate. Verification may be carried out during port State control inspections.

223. An IMO survey suggests that approximately 78 per cent of the merchant ships covered by the Code are expected to have complied with it by 1 July 1998. Those that have not complied are likely to be deprived of insurance coverage and barred from the world's major seaports.

224. The IMO Assembly at its twentieth session by its resolution A.847(20) adopted Guidelines to assist flag States in the implementation of IMO instruments (see A/52/487, para. 146).

225. The Subcommittee on Flag State Implementation at its sixth session in June 1998, approved a Flag State Performance Self-Assessment Form, for final approval by the Marine Environment Protection Committee and MSC. The form establishes a uniform set of internal and external criteria which can be used by flag States to obtain a clear picture of how well their administrations are functioning.[28]

2. Port State control

226. Port State Control can act as a safety net when shipowners, classification societies, insurers or flag State administrators have in one way or another failed to fulfil their responsibilities. It plays an important role in the elimination of sub-standard ships.

227. Enforcement measures that port States can take include the inspection of vessels visiting ports to ensure that they meet IMO requirements regarding safety and marine pollution prevention standards, as well as the detention of vessels. Another measure which some Governments have resorted to is to bar entry into their ports to ships which do not comply with the ISM Code.

228. Article 25, paragraph 2, of the Convention provides that the coastal State has the right, in the case of ships proceeding to internal waters or a call at a port facility outside internal waters, to take the necessary measures to prevent any breach of the conditions to which admission of those ships to internal waters or such a call is subject. In the case of a ship which is passing through the territorial sea without calling at a port, the coastal State's enforcement action is limited to the enforcement of those national laws and regulations which give effect to generally accepted international rules or standards on the design, construction, manning or equipment of ships (see article 21(2) of the Convention).

229. It may be noted that article 211, paragraph 3, of the Convention can provide the basis for the establishment by a group of States of particular requirements for the prevention, reduction and control of pollution of the marine environment as a condition for the entry of foreign vessels into their ports or internal waters. Those requirements are to be "without prejudice to the continued exercise by a vessel of the right of innocent passage or the application of article 25, paragraph 2". One of the States participating in the cooperative arrangement can require a foreign ship which is navigating in its territorial sea to provide information as to whether it is proceeding to a State of the same region participating in such cooperative arrangements, and if so, to indicate whether it complies with the port entry requirements of that State.

3. Regional port State control arrangements

230. Initially it was thought that port State control would be a national concern, but with the adoption and successful operation of the Paris Memorandum of Understanding on Port State Control, it became apparent that regional operations were not only more effective, but also more economical. Many other regions have since then decided to set up their own system: the Latin American Agreement (Agreement of Viña del Mar) was signed in 1992; the Tokyo Memorandum of Understanding, covering Asia and the Pacific, was signed in 1993; the Caribbean Memorandum of Understanding was signed in 1996; the Mediterranean Memorandum of Understanding was signed in 1997; and on 5 June 1998, the Memorandum of Understanding on Port State Control for the Indian Ocean Region was signed by Djibouti, Eritrea, Ethiopia, India, the Islamic Republic of Iran, Kenya, Maldives, Mauritius, Mozambique, Seychelles, South Africa, Sri Lanka, the Sudan, the United Republic of Tanzania and Yemen.[29]

231. Like the other agreements, the Indian Ocean Memorandum of Understanding requires each maritime authority that is a signatory to the agreement to establish and maintain an effective system of port State control and sets an annual required total of inspections of at least 10 per cent

of the estimated total number of foreign merchant ships entering the ports during the year. Exchanges of information are encouraged so that ships which have been inspected by one port State and found to be complying with all safety and marine pollution prevention rules are not subject to too frequent inspections, while ships presenting a hazard and those ships which have been reported by another port State as having deficiencies which need to be rectified will be targeted.

232. Another region which is working towards the adoption of a Memorandum of Understanding in 1999 is West and Central Africa. At the first preparatory meeting on the development of flag and port State capabilities in the West and Central African region in February 1998, 19 countries signed a joint declaration on establishing the port State control regime. A second meeting was scheduled to be held in September to consider the draft text of a Memorandum of Understanding and a draft training programme. A third and final meeting during 1999 is expected to adopt the Memorandum of Understanding.

233. Most of the world's oceans will soon be covered by a global network of regional port State control agreements. Countries in the Persian Gulf region have agreed informally on the need to establish a similar regime, but no date has been set for the first preparatory meeting. IMO has been developing a global strategy for port State control in order to ensure that, while the systems may be regional, the standards applied will be universal.

234. The Tokyo Memorandum of Understanding was amended in August 1997, *inter alia*, to refer to the Procedures for Port State Control in IMO Assembly resolution A.787(19), and to incorporate certain provisions of the 17th amendment to the Paris Memorandum of Understanding which stemmed from the European Union Directive on Port State Control.[30]

235. States signatory to the Paris and Tokyo Memorandum of Understandings held the first Joint Ministerial Conference in March this 1998. In their joint declaration on interregional action to eliminate sub-standard shipping, the Ministers agreed to strengthen compliance with ILO and IMO standards by enhancing the application of port State control in both regions so as to maximize its deterrent effects. The Ministers agreed to exercise rigorous port State control to verify compliance with the ISM Code.

D. Maritime transport

1. Carriage of cargoes

236. Developments since last year's report include the entry into force on 1 July 1998 of the 1996 amendments to chapter VI of the SOLAS Convention, adopted by resolution MSC.47(66) on 4 June 1996; the 1996 amendments to the IBC Code adopted by resolutions MSC.50(66) and MSC.58(67); and the 1996 amendments to the IGC Code adopted by resolution MSC.59(67).

237. Amendments to chapter VI of the SOLAS Convention were adopted at the sixty-ninth session of MSC by resolution MSC.69(69) of 18 May 1998. The amendments, when in force, will replace the existing text of paragraph 6 of regulation 5 on stowage and securing and make it clear that "all cargoes, other than solid and liquid bulk cargoes", should be loaded, stowed and secured in accordance with the Cargo Securing Manual.

2. Carriage of dangerous goods

238. At its sixty-ninth session, MSC adopted by resolution MSC.69(69) of 18 May 1998 an amendment to chapter VII, regulations 5 (documents) and 6 (stowage requirements), of the SOLAS Convention, similar to the one adopted for chapter VI (see para. 237).

239. The Committee also adopted Amendment 29-98 to the International Maritime Dangerous Goods (IMDG) Code for entry into force on 1 January 1999, with a six-month implementation period ending 1 July 1999. The mandatory application of the IMDG Code through amendments to Chapters VI and VII of the SOLAS Convention is under consideration in the Subcommittee on Dangerous Goods, Solid Cargoes and Containers.

Developments relating to the Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Waste in Flasks on Board Ships (INF Code)

240. The IMO Assembly at its twentieth session approved the progress report on the review of the INF Code (see documents A/20/11 and Add.1 and 2, and A/52/487, paras. 156–158) and adopted amendments to the Code by resolution A.853(20). Ships transporting INF Code materials are recommended to carry on board a shipboard emergency plan, which should include: (a) the procedure to be followed in reporting an incident involving INF Code materials; (b) a list of authorities or persons to be contacted in the event of an incident; (c) a detailed description of the action to be taken

immediately by persons on board to prevent, reduce or control the release of INF Code materials; and (d) procedures and points of contact on the ship for coordinating shipboard action with national and local authorities.

241. The amendments state that the reporting requirements for incidents involving dangerous goods, as covered by SOLAS Regulation VII/7-1, should apply both to the loss or likely loss of INF Code cargo overboard and to any incident involving release or probable release of INF Code material. A report should also be made in the event of damage, failure or breakdown of a ship carrying such materials.

242. The Assembly also adopted resolution A.854(20) which includes Guidelines for developing shipboard emergency plans for ships carrying materials subject to the INF Code. The Guidelines are aimed at assisting shipowners in preparing comprehensive Shipboard Emergency Plans for ships carrying INF Code materials and assisting in the response to shipboard emergencies involving such materials and providing information to authorities involved in incidents involving INF Code materials.

243. MSC at its sixty-ninth session approved the proposed amendments to chapter VII of the SOLAS Convention to make the INF Code mandatory and agreed to aim to adopt the draft revised text of the Code at its seventy-first session in 1999 (see 69/22, annexes 19 and 20).

E. Maritime claims

Arrest of ships

244. On 18 December 1997, the General Assembly endorsed, in its resolution 52/182, the recommendation of the Trade and Development Board of the United Nations Conference on Trade and Development (UNCTAD) to convene a diplomatic conference to consider and adopt a convention on arrest of ships. The Conference is scheduled to be held at Geneva from 1 to 12 March 1999.

245. The draft articles of the new convention (LEG/MLM/42-JIGE(IX)/5) to be considered by UNCTAD are a result of the review of the 1952 International Convention for the Unification of Certain Rules Relating to the Arrest of Seagoing Ships undertaken by the joint UNCTAD/IMO Intergovernmental Group of Experts on Maritime Liens and Mortgages and Related Subjects (JIGE). The draft text would apply to any detention or restriction on removal of a ship as a conservatory measure by order of a court to secure a maritime claim, but would not deal with the seizure of a ship in execution or satisfaction of a judgement, an arbitral award or other enforceable instrument. One of its objectives is to produce a legal framework which would protect the interests of owners of cargo and ships by securing the free movement of vessels and by prohibiting arrest for unjustifiable claims and claims not related to the operation of vessels. The review of the 1952 Convention was also for the purpose of harmonizing provisions of the Arrest Convention with the 1993 International Convention on Maritime Liens and Mortgages and ensuring that all maritime liens recognized by the 1993 Convention were covered by the new Arrest Convention.

VII. Offshore installations and structures

246. Over the past five decades, the ever expanding exploration for and exploitation of offshore oil and gas resources have taken place in many parts of the world. The focus of these activities, which was originally concentrated on near-shore, shallow-water prospects, has expanded to include areas of deep water (e.g., in the Gulf of Mexico, and off Brazil, the United Kingdom, Norway, Nigeria, Angola and the Philippines) and severe environmental conditions (e.g., west of the Shetlands, northern Russian Federation and Canada).

247. In accordance with articles 60 and 80 of the Convention, the coastal State has the exclusive right to construct, and to authorize and regulate the construction, operation and use, of artificial islands, installations and structures in the exclusive economic zone and on the continental shelf; it also has exclusive jurisdiction over these islands, installations and structures. Article 208 requires the coastal State to adopt laws and regulations and to take the necessary measures to prevent, reduce and control pollution of the marine environment from artificial islands, installations and structures under their jurisdiction, which must be no less effective than international rules, standards and recommended practices and procedures.

248. The offshore industry has essentially been self-regulatory. However, given its global dimension, some international standards have been developed on certain issues, such as labour standards and training of personnel. There are also global standards for the removal of offshore installations, and more recently discussions have focused on whether the prevention, reduction and control of pollution from offshore installations should be regulated at the global level.

A. Safety standards

249. MSC at its sixty-ninth session concluded that there was currently no need to include standards of competence for maritime personnel on Mobile Offshore Units in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 1978, or in any other relevant instrument (MSC 69/22, para. 7.39).

250. However, recognizing the need to clarify the application of the provisions of the STCW Convention to mobile offshore units, MSC decided that the STCW provisions applied only to self-propelled units proceeding on voyages and not to those which were non-self-propelled or on station. With respect to the latter, the Committee recommended that when considering appropriate standards of training and certification, the country of registry should take account of relevant IMO recommendations, i.e. resolutions A.583(13), A.712(17), and the draft Assembly resolution on Recommendations on Training of Personnel on Mobile Offshore Units (see para. 250). It is recommended that the coastal State in whose exclusive economic zone units are on station and are operating take account of the relevant IMO recommendations, and that it not prescribe higher standards for units registered in other countries than those applied to units registered in the coastal State.[31]

251. The draft resolution on Recommendations on Training of Personnel on Mobile Offshore Units, which MSC approved for submission to the IMO Assembly at its twenty-first session in 1999, are aimed at ensuring adequate levels of safety of life and property at sea and protection of the marine environment complementary to that required by the STCW Convention as amended and the STCW Code. They are not intended to prejudice the rights of coastal States under international law to impose their own additional requirements relating to training, qualifications and certification of personnel on board units engaged in the exploration for or exploitation of the natural resources of the seabed and subsoil over which those States are entitled to exercise sovereign rights (see MSC 69/22, annex 15).

252. The Code for the Safe Practice for the Carriage of Cargoes and Persons by Offshore Supply Vessels (OSV Code), which was adopted by the IMO Assembly in its resolution A.863(20) of 27 November 1997, provides both operator and contractor with an international standard to avoid or reduce to a minimum the hazards which affect offshore supply vessels in their daily operations of carrying cargoes and persons to, from and between offshore installations.

B. Removal and disposal

253. Article 60, paragraph 3, and, by reference article 80 of the Convention require States to remove any installations or structures which are abandoned or disused, taking into account any generally accepted international standards established in this regard by the competent international organization. Where an installation or structure is not entirely removed, appropriate publicity must be given to its depth, position and dimensions. On the basis of the definition of dumping in article 1, paragraph 5 (a), of the Convention and the definition in the London Convention and its 1996 Protocol, the dumping at sea of a decommissioned installation or structure can be considered an option, in which case article 210 of the Convention and the relevant provisions of the London Convention apply.

254. The 1989 IMO Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone (IMO Assembly resolution A.672(16)) can be considered as constituting the generally accepted international standards governing the removal of offshore installations and structures. In this connection, States are advised that the Guidelines provide that no installation or structure should be placed on any continental shelf or in any exclusive economic zone on or after 1 January 1998 unless its design and construction is such that entire removal upon abandonment or permanent disuse would be feasible (para. 3.14). Installations standing in less than 75 metres of water (or less than 100 m for installations put in place after 1 January 1998) and weighing less than 4,000 tons should be totally removed (paras. 3.1 and 3.2), except in certain cases (paras. 3.4 and 3.5).

255. It may be noted that the recommendation of the Scientific Group on Dumping to review the IMO Guidelines in the light of developments since their adoption in 1989 (see LC/SG 19/11, paras. 3.12–3.16, and LC/SG 20/12, paras. 3.19 and 3.20) was not endorsed by the Contracting Parties to the London Convention at their nineteenth Consultative Meeting. The Contracting Parties agreed: to continue the preparation of waste-specific guidance for the implementation of the London Convention 1972 and the 1996 Protocol (see A/52/487, para. 286) concerning the dumping of platforms or other man-made structures at sea; to ensure that such guidance takes account of the latest scientific and technological developments in the field; to provide that disposal be considered on a case-by-case basis, and that the weight/depth standard set out in IMO resolution A.672(16) should not be viewed as the only factor in developing guidance concerning the dumping of platforms

or other man-made structures at sea under the 1972 London Convention; and that there was no need at the current stage to request IMO to review its Guidelines and Standards in this regard.[32]

256. More stringent requirements for the removal of offshore installations and structures have been adopted in some regional instruments. For example, the 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area, after it enters into force, will require its parties to ensure that abandoned or disused offshore units are entirely removed and brought ashore.

257. The Contracting Parties to the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic recently decided (OSPAR decision 98/3) that the dumping, and the leaving wholly or partly in place, of disused offshore installations within the applicable maritime area is prohibited. Derogations are only permitted for certain categories of disused offshore installations, e.g. steel installations weighing more than 10,000 tons and if the competent authority of the Contracting Party is satisfied that the assessment of a proposal for disposal at sea carried out in accordance with annex 2 of decision 98/3 shows that there are significant reasons why disposal at sea is preferable to reuse or recycling or final disposal on land, and that the other Contracting Parties have been consulted in accordance with annex 3. Annex 4 requires that every permit for disposal provides a framework for assessing and monitoring compliance.[33]

C. Pollution from offshore oil and gas activities

258. It was concluded at the Expert Meeting on Environmental Practices in Offshore Oil and Gas Activities, convened by Brazil and the Netherlands from 17 to 20 November 1997 pursuant to decision 4/15 of the Commission on Sustainable Development,[34] that the development of state-of-the-art technology and a better understanding of environmental sensitivities required a flexible approach to the development of regulatory controls, allowing for a case-by-case determination of environmental standards and targets which accommodate a self-regulatory approach. Therefore the "sustainable development" of offshore oil and gas exploration and exploitation could be achieved through joint development of environmental best practice guidelines in offshore oil and gas activities, obtained through open discussion between industries, governmental organizations and other interested parties within the framework of regional or local environmental and socio-economic conditions.[35] The IMO Marine Environment Protection Committee (MEPC) at its forty-first session endorsed this conclusion and agreed to keep the matter on its agenda at future sessions. It invited member States and interested organizations to submit papers on the matter to the Committee for its consideration.

259. MEPC at its 41st session also discussed the application of MARPOL 73/78 Annex I requirements to floating production storage and offloading units (FPSOs) and floating storage units (FSUs) (A/52/487, paras. 279–280). The Oil Industry International Exploration and Production Forum stated that it considered FPSOs and FSUs to be installations for the purposes of article 60 of the Convention.[36] Greenpeace International expressed the view that MEPC should identify any conflicting provisions or existing gaps in current regulations and prepare amendments to Annex I to clearly provide requirements for FPSOs and FSUs under MARPOL 73/78.[37]

260. MEPC agreed to instruct the Subcommittee on Bulk Liquids and Gases to review the application of Annex I of MARPOL 73/78 to FPSOs and FSUs, and in particular to identify those regulations which are applicable, those which are not, and those which may be uncertain as to their applicability, and to make recommendations on such application according to the nature of the uncertainty (see MEPC 41/20, paras. 7.3–7.7).

VIII. Development and management of marine resources and protection and preservation of the marine environment

A. Conservation and management of living marine resources

1. World review of marine fisheries

261. New findings indicate that despite increases in aquaculture production, future demand for fish products were unlikely to be met in the absence of better management of the world's ocean resources.[38] Although the problems of fishery management are widely recognized and international instruments such as the 1995 Fish Stocks Agreement and the Code of Conduct for Responsible Fisheries have already been adopted, fisheries management however has generally failed to protect resources from being overexploited and fisheries from being economically inefficient. Experts agree that several key factors, such as the lack of political will to

make difficult adjustments, particularly in respect of access to fishery resources and fishing rights, persistence of direct and indirect subsidies, lack of control of fishing fleets by flag States, resistance of the fishing industry to changes, lack of participation of traditional fishing communities in the decision-making process and continued use of destructive fishing practices, are considered to be the main reasons for this situation.

262. Projections of world fishery production in 2010 range between 107 and 144 million tons. Only an estimated 74 to 114 million tons of this production will be available for human consumption, although the demand for fish food is forecast to be 110 to 120 million tons. The actual amount obtained from capture fisheries will depend, *inter alia*, on the effectiveness of fisheries management and the improved management of currently overfished stocks, which could provide an increase of 5 to 10 million tons.[39]

263. Recent assessments by FAO, however, provided that over 35 per cent of the world's major marine fisheries resources were showing declining yields and 25 per cent had reached a peak at high exploitation level, and that the potential for further increases in output was very modest at best.[40] It is believed that as overfishing has depleted prized species, like tuna, cod and swordfish. Commercial fisherfolk are currently moving further down the oceanic food chain in search of a catch.[41] As a consequence, second-level marine life normally preyed upon by the fish at the top of the trophic levels are increasingly used for human consumption, thus causing further disruptive effects on the whole food chain, and ultimately could lead to an overall declining production. Some experts have warned that if the global downward shift was not curbed, it could lead to a collapse of marine ecosystems and an effective end of commercial fisheries; they have suggested instead that in the coming decades, fishery managers should emphasize the rebuilding of fish populations within large "no take" marine protected areas[41] (see paras. 317–322). In this connection, note should be made of the recent decision of the New England Fishery Management Council in the United States to establish the first year-round "no take" marine protected area in the Gulf of Maine in view of the serious decline of cod populations in the area.[42] Others have called upon interested countries to review the fishing capacity of their fleets and take action to eliminate overcapacity and reduce excessive fishing pressure in line with sustainable fishing, particularly in relation to large-scale, industrialized vessels.[43]

264. Harmful fishing practices have also caused an annual discarding of an estimated 20 million tons of fish[44] as well as the taking of a large number of incidental catches of sharks, marine mammals, turtles and seabirds. Such practices have adversely affected marine biodiversity. It has been suggested[45] that the use of selective fishing technologies to reduce the capture of unwanted catch, the adoption of management measures such as closed seasons, closed areas, legal minimum mesh size and fish size to reduce the probability of catching undesired sizes and species, and the utilization of by-catch for commercial purposes as a potential source of food could be employed to limit the problem of by-catch and discards. In addition, some environmentally concerned organizations[46] have indicated that trade-related measures should be applied to achieve effective enforcement of conservation regimes. They are of the view that, although such practices are considered to be inconsistent with World Trade Organization rules, regulatory distinctions based upon non-product-related criteria, in particular distinctions based upon production and process methods (PPMs), should be the basis of a regulatory scheme to promote sustainable fishing practices.

265. In this connection, the Third Conference of Ministers of Fisheries, held at A Toxa, Spain, from 17 to 19 September 1997, adopted a declaration inviting international organizations with competence in fisheries and trade on the one hand and the international community on the other, to search for effective solutions to such problems as the interrelations between fisheries resources and food security, trade regulations, fishing overcapacity, non-compliance by vessels flying flags of convenience with conservation measures and insufficient application of the Code of Conduct for Responsible Fisheries, and to apply them as soon as possible, with the object of defining responsible trade practices which will complement and promote responsible fishing.[47]

2. Regional review of the status of fisheries and of conservation and management measures

Atlantic Ocean

266. The International Commission for the Conservation of Atlantic Tunas (ICCAT) at its fifteenth regular meeting (Madrid, 14–21 November 1997) adopted several recommendations and resolutions concerning the conservation and management of Atlantic tunas. These included, *inter alia*, compliance with the minimum size and weight regulations established for ICCAT stocks; reporting of annual nominal catches, total landings and transshipments by Contracting Parties and non-Contracting Parties; implementation of the annual southern albacore catch limit for 1998 and 1999; reduction of catch quotas for North Atlantic swordfish for 1998 and 1999; establishment of percentage shares of total allowable catch (TAC) and

1999–2000 catch quotas for South Atlantic swordfish; reduction in 1998 of blue marlin and white marlin landings from 1996 figures, with the exception of those from small-scale artisanal fisheries; and a recommendation that each Contracting Party establish a pilot programme for a satellite-based vessel monitoring system (VMS).

267. In addition, ICCAT has established a port inspection scheme which provides minimum standards for conducting port inspections of foreign and domestic vessels during offloading and transshipment operations and is designed to ensure individual compliance with management measures, as well as to facilitate the overall monitoring of each party's fisheries for ICCAT-managed species. According to the scheme, when a fishing vessel is in the port of a Contracting Party, its duly authorized inspectors are entitled to monitor compliance with the Commission's conservation measures for all ICCAT-managed species. In the case of a violation of such measures, the inspectors would prepare a report of the inspection, copies of which would be forwarded to the flag State and to the ICCAT secretariat. However, the scheme would allow a party to provide inspection of its own vessels for observance of the Commission's regulations, at the invitation of the port State in which the inspection would take place. As to the inspection itself, it would include examination of the catch, fishing gear, fishing samples and all relevant documents, including log books and cargo manifest. Finally, the scheme requires the master of the vessel to cooperate with the inspectors and parties to act on reports of violations established by foreign inspectors on a similar basis to the reports of national inspectors in accordance with their national legislation, and to cooperate for the facilitation of judicial or other proceedings arising from those reports. For cases in which a violation has occurred, the flag State concerned is required to notify ICCAT of actions it has taken to address the violation vis-à-vis the fishing vessel flying its flag.

North Atlantic Ocean

268. In the north-west Atlantic, the Northwest Atlantic Fisheries Organization (NAFO) at its nineteenth annual meeting (St John's, Canada, 15–19 September 1997) adopted a resolution introducing a scheme to promote compliance by non-Contracting Party vessels with the conservation and enforcement measures established by NAFO, in view of the seriousness of non-Contracting Party fishing activities in its regulatory area.

269. According to the scheme, a non-Contracting Party vessel which has been sighted carrying out fishing activities in the NAFO regulatory area, or engaged in any transshipment activities with another non-Contracting Party inside or outside the regulatory area, is presumed to be undermining NAFO conservation and enforcement measures. Information regarding such sightings would be transmitted by the NAFO secretariat to all Contracting Parties and to the flag State of the sighted vessel. If the sighted vessel consents to be boarded by NAFO inspectors, the findings of the inspectors are transmitted to all Contracting Parties and to the flag State of the vessel. Furthermore, any previously sighted non-Contracting Party vessel entering a port of any NAFO Contracting Party would not be allowed to land or transship any fish until an inspection of its documents, log books, fishing gear, catch on board and any other matter relating to its activities in the regulatory area has been carried out by the authorized officials of the port State. On the one hand, landings and transshipments of some species listed by NAFO are prohibited in all Contracting Party ports unless the vessel has established that they have been caught outside the regulatory area, while on the other hand, landings and transshipments of other species are prohibited unless they have been harvested in accordance with NAFO conservation and enforcement measures.

270. Another feature of this scheme that bears some similarities with the Paris Memorandum of Understanding on port State enforcement of IMO regulations on substandard ships is that each Contracting Party is required to report annually to NAFO the number of inspections of non-Contracting Party vessels it has conducted under the scheme in its ports, the names of the vessels inspected and their respective flag States, the dates and the ports where the inspection was conducted, the results of such inspections and all the evidence presented following the inspection. Information thus compiled could be used by the Standing Committee on Fishing Activities of non-Contracting Parties in the regulatory area (STACFAC) to recommend to NAFO General Council new measures to enhance the observance of the organization's conservation and enforcement measures by non-Contracting Parties, as well as new procedures to enhance the implementation of the scheme by Contracting Parties.

271. ICCAT's port State enforcement and NAFO's scheme for promoting compliance by non-Contracting Parties with conservation and management measures in the regulatory area seem to epitomize a positive trend prevailing within subregional and regional fisheries organizations in favour of an early application of the relevant provisions of the 1995 Fish Stocks Agreement before its entry into force. As recognized by the Agreement itself, subregional and regional fisheries bodies are considered to be important implementing mechanisms for many provisions of the Agreement,

particularly those related to the enforcement of conservation and management measures for straddling fish stocks and highly migratory fish stocks.

272. With respect to the north-east Atlantic, the North-East Atlantic Fisheries Commission (NEAFC) at its sixteenth annual meeting (London, 19–21 November 1997), considered the report of the International Council for the Exploration of the Sea (ICES) Advisory Committee on Fisheries Management (ACFM) on oceanic redfish, blue whiting, mackerel and Norwegian spring spawning herring stocks. It was agreed that the total allowable catch limits (TACs) for 1998 for these stocks were as follows: Norwegian spring spawning herring located in areas beyond national fisheries jurisdiction of Contracting Parties, 102,000 tons; blue whiting, 650,000 tons; oceanic type redfish in areas within and beyond national fisheries jurisdiction of Contracting Parties, 153,000 tons. In addition, the Commission made progress on the establishment of a joint control and enforcement scheme and also agreed to start work related to mackerel and blue whiting in order to assess current knowledge of the two stocks and make necessary recommendations for possible future conservation and management measures.[48]

Central Atlantic Ocean

273. In the east-central Atlantic, a regional strategy for the implementation of the Code of Conduct for Responsible Fisheries was the topic of discussion at the Tenth Session of the Subcommittee on Management of Resources within the Limits of National Jurisdiction of the Fishery Committee for the Eastern and Central Atlantic (CECAF), held at Lomé, from 8 to 11 December 1997. It was recognized that the Code had particular relevance to the east-central Atlantic States in view of the contribution of fisheries to national food security and to the promotion of social and economic development, particularly their potential for providing large quantities of low-value small pelagics for local human food, as well as cash and foreign exchange from smaller volumes of high-value fish, crustacea and molluscs.

274. Members of the Subcommittee were therefore invited to advise on action that might be taken nationally and regionally to implement the Code, and in particular those provisions which are of most importance to the CECAF region. This information should lay the basis for the elaboration of a regional CECAF strategy for the implementation of the Code and to this end members were further invited to identify the critical elements that should form the basis of the regional strategy.[49]

275. In the west-central Atlantic, the Thirteenth Conference of Ministers of the countries members of the Latin American Fisheries Development Organization (OLDEPESCA) met at Belize City from 24 to 27 November 1997 to consider regional issues pertaining to the conservation and management of living marine resources and adopted a declaration (the Belize Declaration) in which the Conference, *inter alia*, reiterated "its profound concern at the existence of commercial practices contrary to international law which lack any scientific basis and disregard the efforts of the member countries to apply the principle of responsible fishing". In addition, OLDEPESCA adopted several resolutions dealing with such issues as the establishment of a system of fisheries information in each member country, the development of fish farming in the region, acknowledgement of the financial support provided by the Inter-American Development Bank to a project on the regional implementation of international legal instruments on fisheries, monitoring of fisheries issues under the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), especially those related to the protection of sharks, European Union restrictions on the canned sardine trade, the tuna embargo, and OLDEPESCA support to the Inter-American Convention for the Protection and Conservation of Sea Turtles.[50]

Mediterranean Sea

276. In addition to the follow-up of decisions adopted at its twenty-second session (October 1997) and the consideration of the report of the second session of the Working Party on Fisheries Economics and Statistics and of topics of concern to the Committee on Aquaculture, the General Fisheries Commission for the Mediterranean (GFCM) at its twenty-third session, held in Rome, from 7 to 10 July 1998, had extensive discussions on its medium- and long-term work programme, including its work programme on capture fisheries.[51]

277. As both the value and volume of the Mediterranean capture fisheries have increased, there has been a growing concern regarding the high levels of fishing effort and the resulting mortality for most resources, particularly in fisheries for large pelagics, demersals and to lesser extent for small pelagics. Other issues considered to be adversely affecting fisheries in the Mediterranean are those related to the degradation of the marine environment; fishing by unidentified vessels; fishing of some stocks at intensities significantly above those consistent with long-term optimal yield; fishing efforts exceeding levels providing maximum economic yield; and competition between industrial fleets and artisanal/coastal vessels. It is believed that incentives

for fishermen to maintain a fishing effort on large pelagics are likely to grow and continue to be greater than the resources can withstand. Therefore, the need to impose effective limitation of effort should remain.

278. In the medium and long term, Mediterranean capture fisheries are likely to face a decrease in production of demersal fish and small pelagics such as anchovy, as well as a competition for resources from other users of the coastal zone. All these factors would compel commercial fisherfolk to reduce or otherwise modify their fishing. As to the prospects for fisheries management, GFCM has indicated its intention to regulate fishing through direct control of the fishing effort, primarily through adjustments to fleet capacity, backed as necessary by appropriate technical measures such as closed areas, closed seasons and limitations on the use of fishing gear. However, those efforts would only succeed if GFCM and its members: (a) acquire the required knowledge of highly migratory stocks and other stocks within areas of their own jurisdiction, as well as the activities of all vessels authorized to fish in such areas; (b) share information on the exploitation and status of all stocks and information on international fleets operating close to their areas of jurisdiction; (c) agree on optimal levels of fishing effort/mortality and on equitable allocation or sharing of fishing opportunities so that a sustainable fishing effort is achieved on the stocks concerned; (d) design rules intended to ensure exploitation of stocks at agreed levels; and (e) enforce those rules.

Indian Ocean

279. The seventh session of the Committee for the Development and Management of Fisheries in the Southwest Indian Ocean of the Indian Ocean Fishery Commission was held at Mahé, Seychelles, from 29 September to 2 October 1997.[52] The meeting considered major developments since the last session of the Committee, future cooperation in fisheries development and management in the region, implementation of the Code of Conduct for Responsible Fisheries, ways of strengthening the structure and functions of the Committee and options for its future role.

280. Among the conclusions agreed at the end of the session, it was decided that the Committee would no longer deal with matters relating to tuna and tuna-like species, in view of the establishment of the Indian Ocean Tuna Commission (IOTC), and would concentrate instead on the improvement of regional and national fishery policy through the adoption of measures aimed at adapting the Code to the particular needs and circumstances of the South-west Indian Ocean and with a view to supporting its regional and national implementation. In this connection, it was decided that technical assistance from FAO would be required to this end. In addition, the Committee recognized the importance for its members to:(a) ratify or accede to the FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement) and the 1995 Fish Stocks Agreement; (b) improve statistics, stock assessment, and monitoring, control and surveillance so that appropriate fisheries management strategies might be pursued;(c) collect socio-economic fishery information in view of the high priority of such information in many countries of the South-west Indian Ocean region; (d) intensify the exchange of fisheries information; and (e) provide additional training in statistics.

281. In addition, given the importance of the FAO Programme of Fisheries Assistance for Small Island Developing States (SIDS) to SIDS of the region, the Committee requested FAO to finalize the Programme as soon as possible for submission to the international donor community as the various areas of assistance would facilitate enhanced fisheries development, conservation and management in island States.

North Pacific

282. Representatives of Canada, Japan, the Russian Federation and the United States, the primary States of origin for salmon stocks in the North Pacific, attended the fifth annual meeting of the North Pacific Anadromous Fish Commission (NPAFC) in Victoria, Canada, from 27 to 31 October 1997, and adopted the reports of its committees on Enforcement, Scientific Research and Statistics, and Finance and Administration.[53]

283. With respect to the issue of enforcement, following a review by the Committee on Enforcement of unauthorized salmon fishing activities in 1997, member States decided to maintain 1998 enforcement activities at similar levels to 1997 as a deterrent to the threat of potential unauthorized fishing activity. In this connection, cooperative efforts resulted in the detection of six drift-net vessels engaged in illegal fishing operations. In addition, they agreed to encourage non-members, as appropriate, to adopt as soon as possible the FAO Compliance Agreement as a mechanism to obligate these countries to ensure that their fishing vessels would not undermine the conservation measures adopted by regional fisheries organizations such as NPAFC.

284. As far as the work of the Committee on Scientific Research and Statistics was concerned, member States reviewed the past year's scientific research and statistics and

agreed to coordinate research activities for the upcoming year. The Commission also discussed the status of the Pacific rim salmon stocks and the effects of climate and ocean conditions on salmon production in the North Pacific Ocean, in the light of the low returns of some major economically important stocks in 1997. Consequently, NPAFC in March 1998 convened a workshop on climate change and salmon production focusing on the impacts of climate change and the 1997–98 El Niño on salmon populations in the North Pacific, including impacts on smaller geographic regions, such as the Sea of Okhotsk, the Bering Sea, the Gulf of Alaska, and the coastal waters of the North America. The purpose was to gain an understanding of the factors contributing to reduced salmon returns in 1997 and to provide information that would help forecast 1998 returns of salmon around the Pacific rim.

South Pacific Ocean

285. The Fourth Annual Meeting of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) was held at Canberra from 8 to 13 September 1997, as well as its two resumed sessions, which took place from 19 to 22 January and 19 to 21 February 1998 respectively.[54]

286. In reviewing the southern bluefin tuna (SBT) fisheries, CCSBT considered reports by Australia, Japan and New Zealand, as well as reports by Taiwan Province of China and the Republic of Korea as observers. The Commission agreed on the need for urgent action to facilitate the accession of the Republic of Korea and Indonesia to CCSBT and to secure the cooperation of Taiwan Province of China since the catch of those non-members had risen rapidly over the past few years to the point where it threatened the recovery of SBT stock. The Commission also noted the increasing number of other non-members fishing for SBT and expressed their concern at this trend. It recognized the need to collect more information in this regard as well as the need to facilitate accession of non-members to CCSBT or otherwise apply its conservation and management measures. However, it could not reach an agreement on the proposed adoption of a certification of trade in SBT as a means of discouraging fishing activities of non-members or on a request of observer status for Greenpeace.

287. In other developments, while CCSBT was able to adopt the recommendations of its Ecologically Related Species Working Group, especially those aimed at reducing by-catch of seabirds in longline SBT fisheries, it could not reach an agreement on such fundamental issues as the total allowable catch and quota allocations for 1998, owing to a disagreement among its members over the status of the SBT stock itself. As a consequence, Australia and New Zealand decided to maintain their respective national allocations to the 1996/97 levels agreed by the Commission while Japan also agreed to restrain its commercial SBT catch to its national allocation for 1996/97 but would implement unilaterally its experimental fishing programme in excess of its national allocation.

Antarctica

288. The sixteenth annual meeting of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) held at Hobart, Australia, from 27 October to 7 November 1997, to consider the conservation and management of Southern Ocean ecosystems and fisheries, was confronted with the problem of widespread illegal fishing of Patagonian toothfish estimated at 10 times the level of legal fishing. It is believed that illegal fish catch in the Convention area was considered to be well over 100,000 tons in 1996, compared to the allowable catch of approximately 13,000 tons. This situation prompted the CCAMLR Scientific Committee to warn that, unless immediate actions were taken, the fish stocks were facing imminent collapse.[55]

289. However, there was general agreement among members of CCAMLR as regards the following: (a) the evidence of large-scale illegal, unreported and unregulated fishing in the Convention area submitted by CCAMLR members during 1996/97 and in the beginning of the 1997/98 season seriously undermined the work of the Commission in achieving the Convention's objective; (b) the extent of existing illegal, unreported and unregulated fishing posed a serious threat to the conservation of stocks of toothfish in the immediate future and also to the survival of several species of seabirds in the Southern Ocean taken as incidental by-catch in longline fishing operations; (c) all information received points to a disregard by non-Contracting Parties of the CCAMLR conservation regime and the sovereign rights of coastal States in the Convention area;(d) not only vessels of non-Contracting Parties to CCAMLR, but also vessels of CCAMLR Contracting Parties were reported to be fishing in the Convention area in contravention of CCAMLR conservation measures in force; and (e) the situation called for collective efforts within CCAMLR, measures by flag States and coastal States and steps vis-à-vis non-Contracting Parties to enhance enforcement and compliance with conservation measures regarding living resources in the Convention area.[56]

290. In view of the above, CCAMLR in 1997 began developing an integrated set of political and legal measures

that included new conservation measures 118/XVI (Scheme to Promote Compliance by non-Contracting Party Vessels with CCAMLR Conservation Measures) and 119/XVI (Requirement for Contracting Parties to License vessels flying their flag in the Convention Area); "resolution 12/XVI on Vessel Monitoring Systems," amendments to the text of the System of Inspection; and mechanisms to address the actions of non-Contracting Parties. Some measures were drawn from the experience of other fisheries organizations, in particular NAFO and ICCAT; other measures took into account recent developments in international law, including the relevant provisions of the 1995 Fish Stocks Agreement dealing with exchange of information on all vessels that fish in contravention of a fisheries organization's conservation measures.[57]

291. With respect to the prevention of incidental mortality of seabirds during fishing operations, CCAMLR indicated that it had adopted a revised Conservation Measure 29/XV (Minimization of the Incidental Mortality of Seabirds in the course of Longline Fishing or Longline Fishing Research in the Convention Area) which, through clarification and removal of inconsistencies, would improve compliance with the measures.[58] According to some findings, longlines used to catch toothfish were considered to be mainly responsible for the large-scale killing of seabirds, some of which are classified as endangered. An estimated 140,000 birds were thought to have been killed during the 1996 fishery.[59]

292. It should be noted that, despite the prevailing situation, the CCAMLR annual meeting was reported to have agreed to open up nearly all areas of the Southern Ocean to the Patagonian toothfish fishery and in this respect adopted a 1997/98 TAC of over 18,000 tons for the fishery.[60]

3. Conservation and management of marine mammals

293. Catch limits for commercial and for aboriginal subsistence whaling, humane killing of whales, objectives of the Southern Ocean Sanctuary, environmental research, management of small cetaceans and cooperation with other international organizations and the Revised Management Scheme (RMS) were the topics of discussions at the fiftieth Annual Meeting of the International Whaling Commission (IWC), which was convened at Muscat, Oman, from 16 to 20 May 1998.

294. During the session, IWC upheld its 1982 decision which had set catch limits for commercial whaling at zero. It therefore, on the one hand, denied a request by Japan for an interim relief allocation of 50 minke whales by coastal community-based whaling and, on the other, called upon Norway to halt all whaling activities in areas under its national jurisdiction. It also indicated that although the Commission had endorsed the RMS for commercial whaling, work on a number of issues (inspection scheme and observer programme) ought to be completed before it would consider establishing catch limits other than zero.

295. In other decisions, IWC renewed the catch limits for several stocks subject to aboriginal subsistence whaling in the Bering-Chukchi-Beaufort seas, the eastern North Pacific, West Greenland, East Greenland and St. Vincent and the Grenadines. However, it called upon Japan to refrain from issuing scientific catch permits for two proposed programmes, one in the southern hemisphere and the other in the western North Pacific. As to the management of small cetaceans, IWC adopted a resolution concerning directed takes of white whales and encouraged a precautionary approach to their management.

296. With respect to the question of the Southern Ocean Sanctuary, the Commission adopted a resolution providing advice to its Scientific Committee on the objectives of such a sanctuary, particularly those related to monitoring depleted populations and conducting research on the effects of environmental changes on whale populations. In this connection, the Commission decided to develop its cooperation with other international organizations in the area of scientific research, as well as to strengthen its commitment to research on environmental changes and their effects on cetaceans.

297. In other developments, the Second Meeting of Parties to the Agreement on Small Cetaceans of the Baltic and North Seas (ASCOBANS), held at Bonn from 17 to 19 November 1997, stated that one of the most important issues facing parties was the need to bring about a reduction in the numbers of small cetaceans caught incidentally by fishery activities. The Meeting decided therefore that the level of by-catch should be reduced to less than 2 per cent of stocks.[61]

298. The Meeting also focused attention on the influence of pollutants on small cetaceans and decided to undertake further research on the effects of organic pollutants on cetaceans and, where appropriate, on what action was needed to be taken. Furthermore, it adopted recommendations on the establishment of protected areas, the avoidance of disturbance to the animals and on further research projects, particularly regarding the status of stocks and the causes of threats to small cetaceans.

B. Non-living marine resources

299. The Convention, while establishing an international ocean regime, provides a framework for the sustainable development and rational management of the living and non-living resources of the ocean. The preceding section has dealt with living marine resources. Non-living marine resources include beach and nearshore minerals, deep sea minerals, offshore oil and gas, and chemicals and freshwater from the sea.

Deep sea minerals

300. One of the most significant benefits to be realized by a coastal State from its exclusive economic zone is the exploitation of non-living marine resources of this zone. According to the Convention, in the exclusive economic zone, the coastal State has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living (article 56(1)(a)). Worldwide, oil and gas remain the largest sector producing non-living resources from the exclusive economic zone. Beside polymetallic nodules found on the deep ocean floor, new sources of metals are gaining in importance, such as polymetallic sulphides found in and near the hydrothermal vents that occur along fissures on the sea floor and cobalt-rich crusts that occur as pavements on the sea floor. While polymetallic nodules are rich in nickel, copper, cobalt and manganese, polymetallic sulphides are rich in copper, zinc, silver and gold. Crusts have a similar metal composition to that of nodules, except that they have a relatively higher cobalt content.

301. All three types of deep seabed minerals can be found within or beyond national jurisdiction. When they occur beyond national jurisdiction, they would be considered part of the common heritage of mankind and would be administered by the International Seabed Authority. The Authority has already approved the exploration plans of seven pioneer investors for polymetallic nodules and is in the process of granting them exploration contracts. In view of the recent research and survey activities carried out in relation to polymetallic sulphides and cobalt-bearing crusts, the Authority has been requested to initiate the preparation of rules on exploration of these minerals (see para. 34).

302. With regard to polymetallic sulphides occurring within the exclusive economic zone of a costal State, hydrothermal vents accompanied by deposits of polymetallic sulphides were discovered in the Bismarck sea in Papua New Guinea's exclusive economic zone in 1991. In 1996, the Government of Papua New Guinea had granted exploration licences to a company for an area covering more than 5,000 square kilometres of sea floor in its exclusive economic zone at a depth of approximately 1,000 metres. According to the company, the reserves of gold in the sulphides are richer than in many land deposits and are worth billions of dollars. The mining technology is yet to be developed and it is believed that to be economically feasible a mining operation might have to lift about 1,000 tons of sulphides a day.[62] It has been reported that in November 1997, the same company "won title to nearly 2,000 square miles [about 5,200 square kilometres] of the territorial waters (sic.) of Papua New Guinea."[63]

Offshore oil and gas

303. The offshore oil and gas industry had a very profitable year in 1997 and the outlook is bright for 1998 and beyond. All the components of the industry such as oil and gas companies, drilling contractors, oilfield equipment suppliers and offshore fabricators experienced increased profits in 1997. The optimism about 1998 and beyond is based on, among other things, a high utilization rate of offshore drilling rigs (near full capacity), a large number of new rigs under construction (e.g., largest number of mobile rigs since the 1980s), a surge in the construction of offshore supply vessels that support exploration drilling and field development activities, and an increase in spending by oil and gas companies on newly bid leases. It is projected that in 1998, countries offering new offshore acreage would include Angola, Australia, Bangladesh, Cambodia, Cameroon, Denmark, Egypt, Gabon, Ireland, Namibia, Senegal, Trinidad and Tobago, the United Kingdom and the United States.[64]

304. In 1997, offshore oil production worldwide increased to 22.5 million barrels per day, representing nearly one third of the world's total oil production. Forecasts indicate that, by 2000, global offshore oil production will rise to 27.5 million barrels per day, of which about 10 per cent would come from deepwater fields.[65]

305. The move of the offshore oil and gas industry to deeper waters farther from the coast gave rise to an important delimitation issue between the United States and Mexico with regard to their continental shelves in the Gulf of Mexico. An area in the western Gulf, called the "donut hole", which in recent years has been considered to have potential for exploratory drilling, lies more than 200 nautical miles off the coast of both countries, although geologically still on the outer continental shelf. By May 1998, the two countries had held two rounds of talks on jurisdiction over the donut hole. A bilateral group of experts exchanged

technical information and agreed to follow up with field studies and a meeting in October 1998. In the meantime, the United States returned unopened bids for several blocks in the donut hole which it had put up in lease sale in August 1997 and also withdrew the lease sale proposed for March 1998.[66]

C. Ecosystems, habitats and species

1. Marine and coastal biodiversity

306. The Conference of Parties to the Convention on Biological Diversity at their fourth meeting in May 1998 adopted decision IV/5 on its programme of work on marine and coastal biological diversity. The programme is intended to assist the implementation of the Jakarta Mandate on Marine and Coastal Biological Diversity (UNEP/CBD/COP/4/5) by identifying key operational objectives and priority activities within the five key programme elements. The Conference of Parties decided that the basic principles for the implementation of the programme of work would be: an ecosystem approach; a precautionary approach; the importance of science; the involvement of local and indigenous communities; and the use of the roster of experts.

307. It was also decided that activities associated with the programme were to be cost-effective and efficient. Duplication of efforts would be avoided and harmonization of respective programmes of work would be pursued through strong coordination between the Convention secretariat and other relevant bodies, in particular the list of partner organizations mentioned in decision II/10, paragraph 13, and the Convention on Wetlands. It should be noted that both the General Assembly and the Division for Ocean Affairs and the Law of the Sea are listed in paragraph 13 of that decision.

308. The key operational objectives of the programme of work for the implementation of the five thematic areas identified in the Jakarta Mandate are presented in the present report as follows: (a) integrated marine and coastal area management (IMCAM) in the section on ocean and coastal zone management (paras. 419–427); (b) marine and coastal protected areas (MCPA) (paras. 317–327); (c) sustainable use of marine and coastal living resources (paras. 309–310); (d) mariculture (para. 311); and (e) alien species (paras. 312–314).

Marine and coastal living resources

309. The Conference agreed to: (a) promote ecosystem approaches to the sustainable use of marine and coastal living resources, including the identification of key variables or interactions, for the purpose of assessing and monitoring components of biological diversity, the sustainable use of such components and ecosystems effects; and (b) make available to the parties information on marine and coastal genetic resources, including bioprospecting.

310. An international conference, entitled "Towards Policies for Conservation and Sustainable Use of Aquatic Genetic Resources" held at Bellagio, Italy, in April 1998 and organized by the International Centre for Living Aquatic Resources Management in association with FAO, discussed the current status and the requirements for policies for the conservation and sustainable use of aquatic genetic resources. The conference identified the need to clarify the conceptual, social, scientific and political bases for taking action and for new initiatives with respect to aquatic genetic resources, including such issues as the sharing of benefits from the exploitation of aquatic genetic resources found outside areas of national jurisdiction.[67]

Mariculture

311. The Conference of Parties agreed to assess the consequences of the above activity on marine and coastal biodiversity and to promote techniques which minimize its adverse impact.

Introduction of new or alien species

312. Both IMO and the Conference of Parties to the Convention on Biological Diversity have emphasized the need for global rules to deal with the problem: a new annex to MARPOL 73/78 on ballast water management, together with guidelines for implementation, is scheduled for adoption in 2000 (see IMO Assembly resolution A.868(20) of 27 November 1997); and the programme of work to implement the Jakarta Mandate envisages the development of a scientifically based global strategy for dealing with the prevention, control and eradication of those alien species that threaten marine and coastal ecosystems, habitats and species. The basis for the development of detailed binding provisions is provided in article 196 of UNCLOS, which requires States to take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the intentional or accidental introduction of new or alien species that may cause significant and harmful changes thereto.

313. The key operational objectives of the programme of work on alien species and genotypes are: (a) to achieve a better understanding of the causes of the introduction of alien species and genotypes and the impact of such introductions on biological diversity; (b) to identify gaps in existing or proposed legal instruments, guidelines and procedures to counteract the introduction of and the adverse effects exerted by alien species and genotypes which threaten ecosystems, habitats or species, paying particular attention to transboundary effects, and to collect information on national and international actions to address these problems, with a view to preparing for the development of a scientifically based global strategy for dealing with the prevention, control and eradication of those alien species which threaten marine and coastal ecosystems, habitats and species; and (c) to establish an "incident list" on introductions of alien species and genotypes through the national reporting process or any other appropriate means. The time schedule for implementation of the first two operational objectives is a minimum of three years; no deadline was indicated for the third objective.

314. Developments in IMO in addressing the problem of the introduction of unwanted aquatic organisms and pathogens through the discharge of ships' ballast water are presented in the section of the present report dealing with pollution from vessels (see paras. 356–359).

Regional developments

315. In the communiqué of the meeting of the Environment Ministers of the Group of 8 (Leeds, United Kingdom, 3–5 April 1998), the Ministers committed themselves to renewed and coordinated efforts to promote international initiatives and agreements to reverse the decline of marine ecosystems, to the promotion of the sustainable use and conservation of marine biodiversity and to the development of management systems based upon an ecosystem approach. Within the general framework of UNCLOS, these included: the Regional Seas Programme of UNEP; global and regional agreements on the management and sustainable use of living marine resources, including the 1995 Fish Stocks Agreement and the FAO Code of Conduct for Responsible Fisheries; the Global Programme of Action to Protect the Marine Environment from Land-Based Activities; and the International Coral Reefs Initiative.

316. At the Ministerial Meeting of the Oslo and Paris Commission (OSPAR), on 22 and 23 July 1998, the Contracting Parties to the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic, which entered into force on 25 March 1998, adopted a new Annex V on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area. That decision recalls UNCLOS, in particular the provisions relating to navigation and the exploitation of natural resources. Annex V assigns to OSPAR the task of drawing up programmes and measures for the control of actual and potential adverse effects of human activity on specific species, communities and habitats and on specific ecological processes. However, OSPAR cannot adopt a programme or measure concerning a question relating to the management of fisheries or maritime transport. If it considers that action is desirable in relation to such a question, it must draw it to the attention of the authority or international body competent for that question.[68]

2. Marine protected areas

317. Marine protected areas are established on the basis of a wide variety of objectives. These include the protection of: (a) ecologically or biologically important areas; (b) specific marine organisms; (c) important geological or geomorphological processes; (d) beautiful seascapes; (e) cultural or historic sites; and (f) recreation. Within the context of national and regional efforts to promote integrated marine and coastal area management, networks of marine and coastal protected areas other conservation areas, and biosphere reserves provide useful and important management tools for different levels of conservation, management and sustainable use of marine and coastal biological diversity and resources.

318. A variety of terms are used for marine protected areas,[69] such as "marine sanctuary", "marine reserve", "marine park", "protected seascape" or "wildlife sanctuary".

319. Several global and regional conventions encourage the designation of marine protected areas by national Governments, e.g. the 1972 Convention concerning the Protection of the World Cultural and Natural Heritage; the 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat; the 1979 Convention on the Conservation of Migratory Species of Wild Animals; the 1992 Convention on Biological Diversity; and also chapter 17 of Agenda 21 of the United Nations Conference on Environment and Development (UNCED). In addition to these instruments, there are also protocols on specially protected areas which have been adopted under a number of UNEP regional conventions.[70]

320. Marine protected areas are generally designated on a national level by Governments. Exceptions to this rule include the Indian Ocean and Southern Ocean Whale

Sanctuaries, which have been established by the International Whaling Commission.

321. The key operational objectives of the programme of work on marine and coastal protected areas as adopted by the Conference of Parties to the Convention on Biological Diversity at its fourth meeting in its decision IV/5 are: (a) to facilitate research and monitoring activities related to the value and the effects of marine and coastal protected or similarly restricted management areas on the sustainable use of marine and coastal living resources; and (b) to develop criteria for the establishment of, and for the management aspects of, marine and coastal protected areas. The time schedules for implementation of the operational objectives are a three- to five-year period for the first, and a minimum of three years for the second objective.

322. The management of each protected area varies depending upon the nature of the resources, their utilization and the human activities occurring within it. A range of management techniques can be used: in some areas protection may be given from all activities which could give rise to environmental damage; in other areas protection is given only against a limited number of such activities, for example certain fishery or shipping activities.

Measures to protect sea areas from shipping activities

323. Not every marine protected area requires special protection from shipping activities. Likewise many sea areas that do require protection from such activities may not have been designated as marine protected areas.

324. Measures aimed at protecting a particular sea area from shipping activities cannot be taken unilaterally in areas beyond the territorial sea. Article 211, paragraph 6, of UNCLOS, MARPOL 73/78, the IMO Guidelines for the Designation of Special Areas and the Identification of Particularly Sensitive Sea Areas (IMO Assembly resolution A.720(17)), and more specifically IMO Assembly resolution A.572(14), which provides the basis for the General Provisions on Ships' Routeing, all require the coastal State that wishes to protect an environmentally sensitive sea area to submit its proposal to IMO for approval.

325. Article 211, paragraph 6, of UNCLOS provides that a coastal State may bring to the attention of the competent international organization (IMO) the fact that the adoption of special mandatory measures for the prevention of pollution from vessels in a "clearly defined area" in its exclusive economic zone is required for recognized technical reasons in relation to the oceanographical and ecological conditions of the area, as well as its utilization or the protection of its resources and the particular character of its traffic. The competent international organization (IMO) then determines whether the conditions in the area concerned correspond to the requirements set out in article 211, paragraph 6. If the organization so determines, the coastal State may for that area adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organization, for "special areas".

326. MEPC at its forty-first session in 1998 decided that the 1991 Guidelines on Particularly Sensitive Sea Areas should be reviewed. It noted the recommendations of the Correspondence Group on Particularly Sensitive Sea Areas (MEPC 41/6/2) that simple and expeditious procedures were required for the identification of particularly sensitive sea areas; that such areas should be shown on hydrographic charts; that environmental, ship safety and navigational aspects should not be considered in isolation from each other; and that the Guidelines should be reassessed in relation to the relevant provisions of UNCLOS (MEPC 41/20, paras. 6.1–6.7).

327. Only two particularly sensitive sea areas have so far been designated by IMO: the Great Barrier Reef in Australia and the archipelago of Sabana-Camagüey in Cuba. The latter was designated in 1997 by resolution MEPC.74(40) (see MEPC 40/21, annex 3).

D. Protection and preservation of the marine environment

328. The topic "Matters of particular concern regarding degradation of the marine environment" is considered by the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) as part of its regular agenda. At its twenty-eighth session, held at Geneva from 20 to 24 April 1998 (GESAMP Reports and Studies No. 66), GESAMP issued a statement included as annex X to the report promoting a more balanced public appreciation of the diverse human activities that can result in damage or risk of damage to the marine environment. The statement is worth noting for the assessment it makes regarding national and international efforts to better protect the marine environment. In this respect, GESAMP observes that despite some localized successes, degradation of the oceans continues on a global scale. Among the successes are the concerted action at the national and international levels to reduce the quantities of oil discharged from ships and the convincing evidence that in certain areas better management of land-based activities has led to cleaner beaches and

bathing water, as well as seafood safer to eat. On the other hand, persistent problems continue in the form of pollution by sewage, chemical and nutrients, unrestrained coastal development and over-exploitation of marine living resources and the destruction of other resources such as mangroves and coastal forests. Unfortunately, in GESAMP's view, implementation of sound, sustainable management of oceans and coasts remains the exception rather than the rule. The reasons are threefold. In the first place, critical scientific information is lacking, or if it is available it is poorly communicated and seldom used. Secondly, a more common barrier comes from governance issues. As pointed out in the report, successful coastal management requires integrated, collaborative action by national and regional agencies as well as the participation of industry and the general public. Finally, GESAMP notes that even where the nature of certain ocean environmental problems is understood, the knowledge to solve them is available and the necessary management tools may exist, there is in many instances a lack of determination and political will to act.

329. In addition, other problems exist, particularly those facing developing countries. The Executive Director of the United Nations Environment Programme has recently stated that sustainable development cannot be defined separately from its financing. It is important to note that sustainable development requires state-of-the-art "clean technologies", and developing States need to be given access to these technologies and skills. In this respect, building a partnership between States, representatives of civil society and the private sector will become crucial in the near future. As regards global and regional cooperation, the proliferation of independent international environmental agreements also weakens efforts to protect the marine environment. There is a need to identify the interdependency of such agreements in order to avoid incompatible developments in areas covered by more than one agreement.

330. Important developments have occurred in relation to the reduction and control of different sources of pollution. New international instruments and rules have been adopted and the scope of existing ones has been widened or reviewed. The challenge now lies in implementing all these agreements, protocols and programmes of action and, for that purpose, creating a partnership among developed and developing States, the competent international organizations and other actors in private and civil society.

331. It is now commonly acknowledged that the best way to achieve concrete results regarding the protection and preservation of the marine environment is through regional, subregional and national action. A regional approach has evolved in the last 20 years in relation to the management of marine and coastal resources and the control of marine pollution, in response to the need for addressing differently the environmental problems in different parts of the ocean. The most noted example of this approach is the Regional Seas Programme launched in 1974 by UNEP.

1. Reduction and control of pollution

(a) Land-based sources of pollution

332. The Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities (A/51/116, annex II) was adopted by an intergovernmental conference held in Washington, D.C., from 23 October to 3 November 1995. The GPA is designed to be a source of conceptual and practical guidance to be drawn upon by national and/or regional authorities in devising and implementing sustained action to prevent, reduce, control and/or eliminate marine degradation from land-based activities.

333. The UNEP Coordinating Office for the GPA was officially opened on 24 November 1997 at The Hague. On the basis of the Programme of Action and Implementation Plan, the Coordination Office has identified eight priority tasks for immediate consideration: to develop and facilitate the preparation of scientific assessments of the impacts of land-based activities on the marine environment; to foster/facilitate the development and implementation of national and regional programmes of action on land-based activities; to establish and coordinate the GPA clearing-house mechanism; to mobilize financial resources; to enhance awareness and education; to encourage the involvement of non-governmental organizations; to report and review progress in GPA implementation; and to engage in consultations on GPA implementation.[71]

334. With regard to the preparation of scientific assessments of land-based sources of pollution, six regional assessments have been prepared and discussed within the framework of regional workshops of GPA Government-designated experts convened in the past several years. In 1998, only one workshop for the South-west Atlantic was scheduled, to be held at Brasilia, from 29 September to 2 October 1998. Besides the assessment of land-based activities being prepared by GESAMP for 1999, UNEP is also undertaking a project funded by the Global Environment Facility concerning "Global International Waters Assessment" (GIWA). This project is being implemented to assist Governments and the GEF Council in establishing priorities for identifying and supporting projects within the GEF international waters portfolio. Cooperative arrangements between GESAMP and GIWA are being established.

335. Although GEF does not consider the GPA eligible per se for funding, projects that meet the criteria established by GEF may be considered. In this respect, the GPA Coordination Office will propose three demonstration projects (approximately US$ 3 million each) during the period 1999–2001. The projects being considered are based on national economic development plans and contain aspects of transboundary integrated watershed and coastal zone management, biodiversity, development of training and capacity-building at the regional level, and development of regional components of the clearing-house.

336. With respect to the clearing-house mechanism, lead agencies have been identified to provide specific knowledge and information on different source categories, such as sewage, oil or nutrients. To this end, several agencies have already pledged their commitment. Three agencies (the World Health Organization (WHO), the International Atomic Energy Agency (IAEA) and IOC) have already adopted resolutions in support of the GPA. However, both WHO and IMO have indicated that they would be unable to take the lead for their respective source categories without additional financial resources. FAO reiterated its previous assurances that the matter was receiving due attention, but also indicated it was still premature to know when endorsement of the GPA would be included in the agenda of its governing body.

337. Concerning reporting and reviewing progress in GPA implementation, the primary source of information is the reports received from Governments. Thus, the GPA Coordination Office is developing a procedure and format for reporting in consultation with Governments. In collaboration with its partner agencies, UNEP plans to convene the first GPA intergovernmental review by 2000. It has been proposed that ad hoc governmental consultations be convened in 1999, in conjunction with the seventh session of the Commission on Sustainable Development to undertake a preliminary review of the Global Programme of Action.

(b) Pollution by dumping, and waste management

338. Following the adoption in 1996 of a Protocol amending the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (the London Convention) (see A/52/487, paras. 288–295), the Contracting Parties to the London Convention are now concentrating on developing the necessary measures to prepare for the entry into force of the 1996 Protocol.

339. At the nineteenth Consultative Meeting, in October 1997, the Contracting Parties adopted Guidelines for the Assessment of Wastes or Other Matter that May be Considered for Dumping, for application under the London Convention, 1972, as well as the 1996 Protocol.[72] The Guidelines embody a mechanism to guide national authorities in evaluating applications for dumping of wastes, and furthermore provide a basis for developing specific guidelines for waste materials that may be considered for disposal at sea: the Scientific Group on Dumping is in the process of developing specific guidelines for items which are permitted to be dumped under the 1996 Protocol, i.e. inert, inorganic geological material; fish waste, or material resulting from industrial fish-processing operations; bulky items comprising iron, steel, etc; sewage sludge; platforms or other man-made structures at sea; vessels; and organic material of natural origin. Provisions guiding the disposal of dredged material were already adopted by the Contracting Parties in 1995, i.e., the Dredged Material Assessment Framework (resolution LC.52(18)).

340. The Contracting Parties at the nineteenth Consultative Meeting adopted the Technical Cooperation and Assistance Programme under the London Convention, 1972.[73] The overall objective of the programme is to provide support to those States in need of assistance to take effective measures to prevent, reduce and, where practicable, eliminate pollution of the sea caused by the dumping of wastes or other matter in accordance with the objectives of the Convention or the Protocol.[74]

Radioactive waste management

341. Recent developments at the regional level include the adoption by the Contracting Parties to the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic of the OSPAR Strategy with regard to Radioactive Substances at a Ministerial Meeting of the OSPAR Commission in July 1998. The parties agreed to substantially reduce discharges, emissions and losses of radioactive substances by 2000 and, by 2020, to reduce them to levels where the additional concentrations in the marine environment above historic levels, resulting from such discharges, emissions and losses, are close to zero.[68]

(c) Pollution from vessels

342. The international rules and standards to prevent, reduce and control pollution of the marine environment from vessels are contained in the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). States are required by UNCLOS, in particular articles 211 and 217, to establish these rules and standards at the global level through the competent international organization or a

diplomatic conference, and once they are "generally accepted", to implement and enforce them at the national level. UNCLOS provides that the national laws and regulations must at least have the same effect as that of generally accepted international rules and standards. They can, however, be stricter: UNCLOS sets the minimum, and not the maximum standards.

343. The 1996 (Protocol I) amendments to MARPOL 73/78, adopted by resolution MEPC.68(38) entered into force on 1 January 1998; the 1996 and 1997 amendments to the IBC Code, adopted by resolutions MEPC.69(38) and MEPC.73(39), entered into force on 1 and 10 July 1998, respectively.

344. Other developments since last year's report (see A/52/487, paras. 303–325) in the establishment of new international rules and standards to prevent, reduce and control pollution of the marine environment from vessels include the adoption of a new annex to MARPOL 73/78 on the prevention of air pollution from ships (see paras. 350–355); the designation of the north-west European waters as a special area under Annex I (see para. 345); the adoption of IMO Assembly resolutions: A.868(20), "Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens" (see paras. 357–358); and A.869(20), "Guidelines for Facilitation of Response to an Oil Pollution Incident Pursuant to Article 7 and Annex of the International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990"; and the designation of the Cuban archipelago of Sabana-Camagüey as a particularly sensitive sea area (see para. 327). Major policy developments, in particular those that relate to the various annexes to MARPOL 73/78 as well as regional developments, are described below.

Discharge of oil

345. Amendments to annex I to MARPOL 73/78, i.e. the annex which regulates the operational discharge of oil from ships, were adopted by MEPC on 25 September 1997 (resolution MEPC.75(40)), including amendments to regulation 10 to provide for the designation of the north-west European waters as a special area. The amendments to annex I are expected to enter into force on 1 February 1999. Once accepted, the amendments to regulation 10 concerning the North-West European Waters special area will take effect on 1 August 1999 (resolution MEPC.77(41) of 2 April 1998).

346. MEPC at its fortieth session also approved unified interpretations to the regulations of annex I to MARPOL.[75]

Pollution by hazardous and noxious substances

347. Annex II to MARPOL 73/78 sets out special requirements with respect to the control of pollution by noxious liquid substances carried in bulk. Such substances are divided into four categories for the purpose of discharge criteria, depending upon how hazardous they are to marine resources, human health, amenities and other legitimate uses of the seas. The provisions relating to the prevention of pollution by harmful substances transported in packaged form are included in annex III to MARPOL.

348. At its twenty-seventh session, in April 1997, GESAMP approved new procedures for the evaluation of hazards of harmful substances carried by ships, developed by its Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships (MEPC 40/5/1).[76] The GESAMP Working Group, which has also been monitoring the development within the Organization for Economic Cooperation and Development (OECD) of an agreement on the harmonization of classification of substances as hazardous to the aquatic environment, expressed its concern to the forty-first session of the MEPC that the current draft of the OECD agreement did not include those aspects defined under UNCLOS or under annex II to MARPOL 73/78 as being relevant to the definition of a marine pollutant. The Working Group was concerned that if the definition remained unchanged, it might inhibit the flexibility necessary for IMO to evaluate the safety and pollution hazards in accordance with the existing criteria under MARPOL 73/78, or to develop new criteria to define operational discharge classifications and ship types (see MEPC 41/3). The Committee noted the concerns of the Group and endorsed the action taken by the IMO secretariat in bringing those concerns to the attention of OECD so that IMO's interests might be taken into account (MEPC 41/20, para. 3.5).

Discharge of sewage

349. Annex IV regulates the operational discharge of sewage from ships. Noting that only 66 States with a combined tonnage of 41.46 per cent had acceded to the annex and that that percentage had not increased in several years, MEPC at its fortieth session agreed to discuss the revision of annex IV at its forty-second session. In order to ascertain the reason why annex IV had not received the necessary support, member States with notable tonnage were asked to indicate why they had not been prepared to accede.[77]

Air pollution from ships

350. Global rules to limit air pollution from ships are now included in a new annex VI (Regulations for the Prevention of Air Pollution from Ships) to MARPOL 73/78 and form part of the international rules and standards which States are required by article 211 of UNCLOS to establish.

351. The new annex VI was added via the adoption by the Conference of Parties to MARPOL 73/78 on 26 September 1998 of the Protocol of 1997 to amend MARPOL 73/78.[78] Annex VI will enter into force 12 months after the date on which it is accepted by not less than 15 States, the combined tonnage of which must not be less than 50 per cent of the gross tonnage of the world's merchant shipping fleet. Conference resolution 1 provides for a review of the Protocol by the Marine Environment Protection Committee in the event that the conditions for its entry into force have not been met by 31 December 2002.[79]

352. Annex VI prohibits deliberate emissions of ozone-depleting substances, which include halons and chlorofluorocarbons (CFCs), and sets limits on the emissions of sulphur oxide and nitrogen oxide from ship exhausts. It sets the global cap on the sulphur content of any fuel oil on board ships and provides for the future monitoring of the worldwide average sulphur content of fuel. More stringent control of sulphur emissions can be exercised in special sulphur oxide emission control areas. The Baltic Sea is designated as a sulphur oxide emission control area in the Protocol.

353. In view of the difficulties of establishing with precision the actual weighted average nitrogen oxide emission of marine diesel engines in service on vessels, the Conference adopted by resolution 2 the Technical Code on Control of Emissions of Nitrogen Oxides from Marine Diesel Engines, which provides a simple, practical set of requirements for the testing, survey and certification of marine diesel engines to ensure that they comply with the limits set forth in the Protocol (see MP/CONF.3/35).

354. Annex VI prohibits incineration on board ships of certain products, such as contaminated packaging materials and polychlorinated biphenyls (PCBs). MEPC at its fortieth session, in 1997, adopted by its resolution MEPC.76(40) Standard Specifications for Shipboard Incinerators, which Governments are urged to apply when implementing the provisions of MARPOL 73/78 annexes V and VI.

355. Regulation 11 of annex VI on Detection of Violations and Enforcement repeats practically verbatim the wording of article 6 of MARPOL 73/78, except that it has added an additional paragraph and the reference to discharges from ships has been replaced by the term "emissions". The new paragraph provides that the "international law concerning the prevention, reduction and control of pollution of the marine environment from ships, including that law relating to enforcement and safeguards, in force at the time of application or interpretation of this Annex, applies, *mutatis mutandis*, to the rules and standards set forth in this Annex." The relevant provisions of UNCLOS thus apply to the Protocol.

Harmful aquatic organisms in ballast water

356. It is estimated that about 10 billion tonnes of ballast water is transferred each year. Discharged ballast water is said to be the most prominent medium for transferring new or alien species. Problems occur where the water taken on board for ballasting a vessel contains aquatic organisms, which may cause harmful algal blooms after their release, or pathogens, which can have serious consequences for human health. As ships travel faster and faster, the survival rates of species carried in ballast tanks has increased. As a result, many introductions of non-indigenous organisms in new locations have occurred, often with disastrous consequences for the local ecosystems, which may include important fish stocks or rare species.

357. The Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens, which were adopted by the IMO Assembly at its twentieth session by resolution A.868(20), are aimed at minimizing the introduction of harmful aquatic organisms and pathogens from ships' ballast water and associated sediments while protecting the safety of ships. The resolution notes the objectives of the Convention on Biological Diversity and that the transfer and introduction of alien aquatic species with ballast water threatens the conservation and sustainable use of biological diversity.

358. Recommendations in the Guidelines for dealing with the problem, including ways to reduce the chances of taking harmful organisms on board, include informing local agents and/or ships of areas and situations where uptake of ballast water should be minimized, such as areas with known populations of harmful pathogens; advising ships to avoid loading ballast water in very shallow water or in areas where propellers may stir up sediment; and avoiding the unnecessary discharge of ballast. Procedures for dealing with ballast water include exchange of ballast at sea and discharge at reception facilities.

359. In the resolution MEPC is requested to work towards the completion of legally binding provisions on ballast water

management, in the form of a new annex to MARPOL 73/78, which could be adopted by the Conference of Parties to MARPOL in 2000. The Assembly also requested the Maritime Safety Committee to include in its work programme studies on the hazards and potential consequences for various existing ship types and operations. Appendix 2 of the Guidelines provides guidance on the safety aspects of ballast water exchange at sea (see also A/52/487, paras. 324–325).

Small ships

360. In order to address the problem of pollution from garbage in the territorial sea generated mainly by pleasure craft and fishing boats (ibid., para. 309), the States in the Caribbean region adopted a Code of Conduct for the Prevention of Pollution from Small Ships in Marinas and Anchorages in the Caribbean Region. The States bordering the Baltic Sea have recommended that all craft be equipped with garbage retention appliances suitable for collecting and, wherever possible, separating garbage on board and that all small ports and marinas be provided with adequate facilities for the reception of garbage from those vessels which use them (see Helsinki Commission recommendation 19/9, adopted on 26 March 1998).

361. The item "Development of measures to prevent pollution from small craft" has been included in MEPC's long-term work plan (see IMO Assembly resolution A.846(20)).

Reception facilities

362. Inadequate reception facilities for dirty ballast water, waste oil and garbage present a serious worldwide problem for the shipping industry. Most States have not fulfilled their obligations under MARPOL 73/78 to provide adequate reception facilities. MEPC at its forty-first session agreed to establish a working group in order to develop means for improving the availability and use of port waste reception facilities for shipping on a global basis. The Working Group will also address the definition of "adequate", since the difficulty in defining this word in relation to reception facilities was highlighted during the session (see MEPC 41/20, section 11 and annex 5).

363. The Helsinki Commission at its nineteenth session adopted Guidelines for the establishment of a "no-special-fee" system for the discharge of ship-generated oily wastes (HELCOM recommendation 19/8 of 26 March 1998), which the parties to the Helsinki Convention are recommended to apply as of 1 January 2000. The "no-special-fee" system is defined as a charging system where the cost of reception, handling and disposal of ship-generated wastes originating from the normal operation of the ship is included in the harbour fee or otherwise charged to the ship irrespective of whether wastes are delivered.

Illegal discharges

364. The institution of a no-special-fee system constitutes one of the measures that the Baltic Sea States have developed to deal with the problem of illegal discharges of oily wastes; another is the adoption of Guidelines for Cooperation in Investigating Violations or Suspected Violations of Discharge and Related Regulations for Ships, Dumping and Incineration Regulations (HELCOM recommendation 19/16 of 24 March 1998); and the third is the introduction of a harmonized system of fines in case a ship violates anti-pollution regulations (HELCOM recommendation 19/14).

365. The Guidelines under HELCOM recommendation 19/16 are applicable to any ship – regardless of whether it flies the flag of a State party to MARPOL 73/78 – which has violated or is believed to have violated: (a) the discharge provisions of annexes I, II and V to MARPOL 73/78 in the internal waters, territorial sea or exclusive economic zone of the Contracting Parties; or (b) the sewage discharge provisions and prohibition of incineration of ship-generated wastes stipulated in Regulation 9 B of annex IV to the 1974 Helsinki Convention in the internal waters and territorial seas of Contracting Parties (incineration is prohibited under article 10 of the Helsinki Convention). The Guidelines refer to the provisions of article 218 of UNCLOS and apply to any ship which is voluntarily within a port or at an offshore terminal of a Contracting Party in case of any discharge from that ship made in contravention of annexes I, II and V to MARPOL 73/78 in waters beyond the jurisdiction of the Contracting Parties.

366. There are five annexes to the Guidelines: a sample form for the notification of an offence against a ship flying the flag of a Contracting Party (annex 1); a sample form for a ship flying the flag of a non-Contracting Party (annex 2); extracts from IMO Assembly resolution A.787(19) containing an itemized list of possible evidence on alleged contravention of MARPOL annexes I and II; discharge provisions (annexes 3 and 4); and a list of national authorities cooperating within the Guidelines (annex 5).[80]

367. The Criteria for a Common Minimum Level of Fines in Case a Ship Violates Anti-pollution Regulations, adopted by HELCOM recommendation 19/14 of 26 March 1998, are aimed at establishing a harmonized penal system in cases of convictions of violations of regulations adopted under

MARPOL 73/78 and the Helsinki Convention. The Criteria recommend that a higher fine should be imposed on intentional violations than on negligent violations, and that violation of discharge regulations at night may be interpreted as pointing to an intentional violation. Failure to maintain the oil and cargo record books properly is regarded as a continuing offence, which begins when no proper entry is made on the high sea and ceases when the vessel enters the territorial sea of a Contracting Party.

(d) Pollution from the atmosphere

368. A number of environmental issues are related to the atmosphere and its changes. Currently, priority is being given to the emissions and concentration of greenhouse gases causing the risks of global climate change (see paras. 371–373). Since atmospheric emissions entering the sea through precipitation over the open ocean are normally diluted and diffused, the immediate effects of atmospheric pollutants such as smog, toxic air pollutants and acidic depositions entering the sea through precipitation (most of the earth's evaporation (86 per cent) and precipitation (78 per cent) takes place over the oceans) have not yet been identified by the international community as requiring urgent remedial action. However, according to some scientific studies, the adverse impact of atmospheric deposit on estuaries and other large water bodies in coastal areas may be significant owing especially to acidic pollutants, which play an important role in the acidification of surface waters and are important factors in causing eutrophication (oxygen depletion) of water bodies. The studies, observing the complexity of the interactions between living organisms and the chemistry of their aquatic habitats, note that the ecosystem of the entire water body may be affected through the predator-prey relationships of the food web and that species of plants and animals may decline or disappear as acidity increases. Other toxic pollutants (among them pesticides, PCBs, polycyclic aromatic hydrocarbons (PAHs), dioxins, and volatile organic compounds (e.g., benzene, carbon tetrachloride)) are emitted into the atmosphere and carried to the sea through air, as well as water. Many of them may classify as persistent organic pollutants (POPs).

369. In regard to those pollutants which have been identified as representing a serious threat to human health and the environment and requiring an urgent international response, the adoption of the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants deserves special mention. The Protocol, adopted on 24 June 1998 in Aarhus, Denmark, within the framework of the Economic Commission for Europe (ECE), recognized that the atmosphere is the dominant medium of POP transport and that measures to control POP emissions would contribute to the protection of areas outside ECE region, including the Arctic and international waters. It contains obligations aimed at controlling, reducing and eliminating discharges and emissions.

370. In addition to those regional developments, the Intergovernmental Negotiating Committee for an International Legally Binding Instrument for Implementing International Action on Certain Persistent Organic Pollutants met at its first session from 29 June to 3 July 1998 in Montreal, Canada.[81] The session, convened within the framework of further implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (A/51/116, annex II) and in conformity with UNEP Governing Council decision 19/13 C of 7 February 1997,[82] discussed, *inter alia*, possible articles proposed by UNEP for inclusion in an international legally binding instrument, which were based on other relevant multilateral agreements. Those articles were related to: measures to reduce and/or eliminate releases of POPs into the environment; national plans and progress reports; the process for adding chemicals listed in the Convention; and management and disposal of POP stockpiles. The Negotiating Committee also established an expert group (Criteria Expert Group for Persistent Organic Pollutants) to develop science-based criteria and a procedure for identifying additional persistent organic pollutants as candidates for future international action. The process should incorporate criteria pertaining to persistence, bioaccumulation, toxicity and exposure in different regions and should take into account the potential for regional and global transport including dispersion mechanisms for the atmosphere and the hydrosphere, migratory species and the need to reflect possible influences of marine transport and tropical climates. The group noted in this context that there might be marine transport of POPs through currents, or through repeated dissipation and condensation, as well as through migrating marine species.

Climate change

371. With respect to climate change, the adoption on 11 December 1997, within the framework of the Berlin Mandate[83] process, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change has been noted as an important achievement. One aim of the process was to strengthen the commitments for developed countries both to elaborate policies and measures and to set quantified limitation and reduction objectives within specified time frames for their anthropogenic emissions by sources and

removal by sinks of greenhouse gases not controlled by the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. Among other obligations resulting from the Kyoto Protocol, the developed countries shall pursue limitation or reduction of emission of greenhouse gases from aviation and marine bunker fuels, working through the ICAO and IMO, respectively. The United Nations General Assembly in its turn, in its resolution 52/199 of 18 December 1997 entitled "Protection of global climate for present and future generations of mankind" called upon all States to strive for a successful outcome of the Berlin Mandate process.

372. As reported above in the discussion of small island developing States (paras. 107–114) the Commission on Sustainable Development at its sixth session also dealt with the effect of the climate change and sea level rise. In this context, the Commission welcomed the adoption and the opening for signature of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and urged the international community, and in particular annex I parties to that Convention, to become Parties to the Kyoto Protocol as soon as possible in order to facilitate its early entry into force.[84]

373. In addition to climate change, the General Assembly at its fifty-second session also addressed the El Niño phenomenon. In its resolution 52/200 of 18 December 1997 entitled "International cooperation to reduce the impact of the El Niño phenomenon", it took into account that the El Niño Southern Oscillation Phenomenon, commonly known as "El Niño", had had an acute impact in several regions of the world, with particular severity and frequency in the coastal countries of the Pacific Ocean, and noted that El Niño had a recurring character and had produced disastrous effects, resulting in large material, economic, human and environmental losses, with particular impact in the coastal countries of the Pacific Ocean, especially in developing countries. The Assembly, *inter alia*, invited States to support the oceanographic observation networks to observe, describe and predict climate anomalies related to El Niño.

2. Regional cooperation: review of regional seas programmes and action plans

374. UNEP organized the First Inter-Regional Seas Programme Consultation meeting at The Hague, from 24 to 26 June 1998. For the first time, all secretariats and coordinating units of regional seas programmes came together to discuss matters of common concern. Among the issues discussed during the consultation were the status of implementation of regional conventions and action plans; common problems and areas of interest for cooperation; evolution and future of the Regional Seas Programme; and possible coordinated contributions and input to the seventh session of the Commission on Sustainable Development which will review the status of implementation of chapter 17 of Agenda 21 (see UNEP/WBRS.1/7).

375. Several problems hampering implementation of the Regional Seas Programme were identified and discussed by the participants, in particular regarding the role of regional institutions and the need for coordination and national involvement. It was also pointed out that programmes could be presented better at global meetings and forums and that global conventions should recognize that the programme has great potential for focusing interests on regional issues. It was felt that there was a need for improved interaction with the fisheries sector as well as cooperation with the oil industry in relation to the implementation of the MARPOL Convention. Many participants criticized the inaction or non-compliance on the part of national institutions with regard to the implementation of action plans as well as the lack of funding to support national institutions in the implementation of regional conventions. Several actions were recommended in order to address institutional and coordination problems and it was suggested that a methodology should be developed for undertaking a cost-benefit analysis of the effectiveness of the regional conventions. It was further suggested that a document should be prepared outlining the socio-economic benefits and implications for States of the regional conventions.

376. The Pan African Conference on Sustainable Integrated Coastal Management (PACSICOM), co-sponsored by the Governments of Finland and Mozambique, as well as UNEP and the United Nations Educational, Scientific and Cultural Organization (UNESCO), was held at Maputo from 18 to 25 July 1998. The forum provided an occasion for African countries to reinforce intergovernmental dialogue on the increasing threats to their marine and coastal environments and to discuss measures required to meet the complex challenges emerging in the region's coastal areas, in order to achieve efficient and productive sustainable development.[85] Among the commitments made by the participants was the convening of a Pan African Conference to promote cooperation among African States in the implementation and review of regional conventions, programmes and action plans to protect, manage and develop Africa's marine and coastal environment. The Conference is to be held in Cape Town, South Africa, from 30 November to 4 December 1998.

377. Based on information provided by UNEP, the following developments have occurred during the past year.

Caribbean Action Plan

378. Belize has recently ratified the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (the Cartagena Convention) and the Protocol Concerning Cooperation in Combating Oil Spills in the Wider Caribbean Region, thus bringing the total number of Contracting Parties to 20.

379. The Specially Protected Areas and Wildlife (SPAW) Protocol of the Cartagena Convention established regional mechanisms for the development and implementation of guidelines for the conservation and preservation of threatened and endangered species and to protect areas of ecological importance to the health of the coastal and marine environment of the wider Caribbean region. During the past year, Cuba and Colombia ratified SPAW, bringing the total number of Parties to six. Three more ratifications are required for the Protocol to enter into force.

380. In June 1998, the Caribbean Environment Programme (CEP) convened the Third Meeting of the Contracting Parties to the Cartagena Convention to negotiate a protocol on land-based sources of marine pollution. The meeting concluded with agreement on a draft text and annexes. Once adopted and having entered into force, the Protocol will require parties to undertake actions to prevent, reduce and control pollution of the marine environment from land-based sources and activities. Through the draft protocol and its annexes, CEP will be able to promote the establishment of guidelines, criteria and standards called for under article 271 of UNCLOS.

381. CEP has been implementing a major project for information dissemination in the wider Caribbean region. The project is intended to increase networking among the countries of the region and to facilitate the flow of scientific information. In addition, through the development of its Web site, CEP is also making relevant publications available in electronic format.

Eastern Africa Action Plan

382. The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (the Nairobi Convention) entered into force on 30 May 1996.

383. Under the auspices of the Nairobi Convention, a project on the Transboundary Diagnostic Analysis and Strategic Action Programme for the Marine and Coastal Environment of the Western Indian Ocean is being developed. The project will address environmental problems, in particular, transboundary issues in the Western Indian Ocean. The legal issues to be dealt with include planning and regulation of the coastal zone, such as mangrove management and inshore fisheries.

384. Decision 1/4 of the First Conference of the Parties to the Nairobi Convention, held in March 1997, established an Ad Hoc Technical and Legal Working Group to review and update the Convention so as to take into account developments in the field of environment which had taken place since its adoption in 1985.

East Asian Seas Action Plan

385. At the Meeting of Plenipotentiaries of the East Asian Seas Action Plan, held at Bangkok on 27 and 28 October 1994, the Governments of Australia, Cambodia, China, Korea and Viet Nam joined the Action Plan and, together with the original five member States (Indonesia, Malaysia, Philippines, Singapore and Thailand), adopted the revised Action Plan for the Protection and Sustainable Development of the Marine and Coastal Areas of the East Asian Region and the Long-term Strategy (COBSEA, 1994–2009).

386. A meeting of experts was held in July 1998 to discuss the role of the East Asian Seas Regional Coordinating Unit in the Action Plan. The results of the meeting are being evaluated and will be presented to the Meeting of COBSEA to be held in November 1998. A long-term plan with pragmatic results that will satisfy the requirements of the Action Plan will then be prepared.

387. After the GPA Meeting held in Cairns, Australia, in 1997 to discuss action to implement the GPA for the East Asian Seas region, two products were required. The first was a regional and country overview of the sources of land-based activities that polluted the marine environment and the second was a regional action plan developed by the countries. The overview and summary of each country's contribution was prepared. The action plan is now under preparation with assistance from the countries and will be presented to the COBSEA meeting in November 1998 for endorsement.

Kuwait Action Plan

388. A new Protocol on the Control of Marine Transboundary Movements and Disposal of Hazardous Wastes was adopted by States members of the Regional Organization for the Protection of the Marine Environment (ROPME) at Tehran on 17 March 1998.

389. An expert meeting on the status of implementation of the Protocol concerning Marine Pollution resulting from Exploration and Exploitation of the Continental Shelf was

organized in October 1997. The meeting developed a regional action plan and elements to be used in the preparation of national action plans for the implementation of the Protocol. In addition, ROPME is preparing an expert meeting to assess the regional need for a legal instrument dealing with biological diversity and establishment of specially protected areas.

390. ROPME has developed a regional plan of action, which is consistent with the Washington Declaration and the Global Plan of Action for the Protection of the Marine Environment from Land-based Activities. The first phase includes the updating of surveys on land-based activities, a pilot study on POPs, a river basin management programme and the development of standards and criteria for the management of land-based activities.

Mediterranean Action Plan

391. The Mediterranean Action Plan held its first meeting of Government-designated legal and technical experts on the preparation of appropriate rules and procedures for the determination of liability and compensation for damage resulting from pollution of the marine environment in the Mediterranean Sea area in September 1997. During the meeting reservations were expressed on a number of aspects of the approach adopted to the problem. It was thus felt that it was still premature to adopt a Protocol. Consequently, the meeting requested the secretariat to continue to compile information on international practice in the field, to be reviewed at a later meeting. That meeting is expected to identify appropriate innovative approaches for the development of rules and procedures for the determination of liability and compensation for damage resulting from pollution of the marine environment which could be readily applied in the Mediterranean region.

392. The Contracting Parties to the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean adopted in Tunis in November 1997 the Strategic Action Programme to address pollution from land-based activities. The programme aims at improving the quality of the marine environment by improved shared management of land-based pollution. It is also designed to assist parties in taking actions individually or jointly within their respective policies, priorities and resources, leading to the prevention, reduction, control and/or elimination of pollution of the marine environment, as well as to its recovery from the impacts of land-based activities. It is anticipated that the achievement of the objectives of the plan will contribute to maintaining and, where appropriate, restoring the productive capacity and biodiversity of the marine environment, ensuring the protection of human health, as well as promoting the conservation and sustainable use of marine living resources.

393. A set of criteria for the preparation of inventories of biological diversity in the Mediterranean was finalized by a meeting of experts held at Athens from 8 to 10 September 1997 and was proposed for adoption by the Contracting Parties to the Barcelona Convention. The rationale behind the criteria was based on, in particular, the need to strengthen the management of existing marine and coastal specially protected areas (SPAs) and to establish new SPAs covering the most critical marine habitats and ecosystems of the region.

North West Pacific Action Plan

394. At the Second Intergovernmental Meeting on the North West Pacific Action Plan (NOWPAP), held at Tokyo on 20 November 1996, five priority projects were agreed upon: establishment of a comprehensive database and information management system; survey of national environmental legislation, objectives, strategies and policies; establishment of a collaborative, regional monitoring programme; development of effective measures for regional cooperation in marine pollution, preparedness and response; and establishment of regional activity centres and their networks.

395. UNEP convened the Third Intergovernmental Meeting of NOWPAP on 9 April 1998 at Vladivostock, Russian Federation. The meeting succeeded in agreeing upon the procedure for the establishment of a network of regional activity centres. Furthermore, the NOWPAP Forum on Marine Pollution, Preparedness and Response was established in July 1997. At the first meeting of the Forum, at Toyama, Japan in July 1997, priority initial tasks were identified and allocated to respective Government members of the Forum. A regional Memorandum of Understanding, to be signed by the NOWPAP member States, is currently under discussion. It will be the initial development of a regional contingency plan which will develop effective measures for regional cooperation in marine pollution, preparedness and response.

396. UNEP continues to assist in overseeing the project on the survey of national environmental legislation, objectives, strategies and policies. The work plan is being executed by national focal points and experts designated by the member States. The national reports will be reviewed and a regional report will be prepared on the basis of the analysis made by each focal point/expert. The national reports will conduct a review of existing national legislation, policies, objectives and strategies for achieving environmental objectives and

a review of global and regional instruments to which the countries in the region are parties and measures for their implementation. Ultimately, it is hoped that this exercise will enhance the harmonization, development and implementation of environmental legislation and policies among NOWPAP States.

South Asian Seas Action Plan

397. The Action Plan for the Protection and Management of the Marine and Coastal Environment of the South Asian Regional Seas Programme was adopted in March 1995 and came into force in January 1998. It has been ratified by Bangladesh, India, Maldives, Pakistan, and Sri Lanka. The first Meeting of the Parties is scheduled to be held in October 1998. The South Asian Cooperative Environment Programme (SACEP) has been designated as the secretariat for the implementation of the Action Plan.

398. Four priority areas have been identified for programme implementation under the South Asian Seas Action Plan: integrated coastal zone management; development and implementation of national and regional oil spill contingency planning; human resource development through strengthening regional centres of excellence; and land-based sources of pollution.

399. UNEP, in collaboration with SACEP, convened a workshop for South Asian countries on the implementation of environmental Conventions and relevant maritime Conventions. Senior government officials from the seven South Asian countries participated in the workshop. The workshop reviewed the adequacy of existing legal and institutional arrangements in those countries for the implementation of the environmental conventions and developed suggestions for enhancing effectiveness in their implementation.

South Pacific Regional Environment Programme

400. The Fourth Meeting of the Conference of the Parties to the South Pacific Regional Environment Programme (SPREP) was held in September 1998. The Conference discussed, among other things, amendments to formally transfer the secretariat from the Secretariat of the Pacific Community (SPC) to SPREP. Consideration has also been given to the setting up of working groups to amend the two Protocols to the Convention, to bring them in line with the 1996 Protocol to the London Convention and the provisions of the International Convention on Oil Pollution Preparedness, Response and Cooperation.

401. With respect to integrated coastal area management, SPREP activities draw on the Global Plan of Action for National Environmental Management Strategies and the Barbados Programme of Action. Following the success of the 1997 Pacific Year of the Coral Reef, the 18 member countries met in April 1998 to develop a Five Year Coral Reef Strategic Action Plan. The UNEP/SPREP Global Programme of Action for Protection of the Marine Environment from Land-based Activities is being partly implemented by activities specifically addressing persistent organic pollutants (POPs). An Australian-funded project is currently in phase one, assessing stockpiles of chemicals in 13 countries in the region.

402. Through the Pacific Ocean Pollution Prevention Programme (PACPOL), SPREP is endeavouring to coordinate regional efforts to address pollution from vessels in 14 countries. PACPOL, partly funded through Canada-South Pacific Ocean Development Programme I and II (CSPODP) and IMO, seeks to assist SPREP and SPC member countries in the implementation of IMO Conventions and the components of UNCLOS which relate to marine pollution.

3. Other regions

403. The following developments, not falling within the purview of the Regional Seas Programme, occurred during the past year.

Antarctica

404. The Madrid Protocol on Environment Protection to the Antarctic Treaty entered into force on 14 January 1998, following ratification by the 26 Antarctic Treaty consultative Parties. The Protocol, which had been voluntarily implemented by States parties to the Antarctic Treaty, aims at furthering the environmental objectives of the Antarctic Treaty System by designating Antarctica as a natural reserve, devoted to peace and science. The Protocol provides that protection of the Antarctic environment, dependent and associated ecosystems, and the intrinsic value of Antarctica must be fundamental considerations in the planning and conduct of all human activities in Antarctica. The Madrid Protocol prohibits mining. The ban is of indefinite duration and strict rules for modifying it are provided. In brief, the prohibition can be modified at any time if all parties agree. If requested, after 50 years, a review conference may decide to modify the mining prohibition, provided that at least three fourths of the current consultative parties agree, a legal regime for controlling mining is in force and the sovereign interests of parties are safeguarded. The Antarctic area, to which the Protocol applies, is defined by reference to article

VI of the Antarctic Treaty and is situated in the area south of 60° South Latitude.

405. Five annexes supplement the Protocol. Annex I concerns environmental impact assessment; annex II, conservation of Antarctic fauna and flora; and annex III, waste disposal and waste management. Annex IV, devoted to the prevention of marine pollution, prohibits, as a general rule, any discharge into the sea of oil or oily mixture except in the cases permitted under annex I to MARPOL 73/78. Disposal into the sea of any kind of garbage is also prohibited, with the exception of food wastes and sewage under certain circumstances and at a distance not less than 12 nautical miles from the nearest land or ice shelf. Annex V deals with area protection and management. Two different kinds of special areas may be designated in accordance with the Protocol: (a) Antarctic Specially Protected Areas, comprising any area, including any marine area, designated to protect outstanding environmental, scientific, historic, aesthetic or wilderness values, or ongoing or planned scientific research; and (b) Antarctic Specially Managed Areas, comprising any area, including any marine area, where activities are being conducted or may be conducted in order to assist in the planning and coordination of activities, avoid possible conflicts, improve cooperation between parties or minimize environmental impacts. In these areas activities shall be prohibited, restricted or managed in accordance with management plans to be adopted by the Treaty Consultative Meeting.

Arctic Ocean

406. As stated in last year's report, the Arctic Council was established at Ottawa on 19 September 1996 to provide the means for improving international cooperation and consultation on Arctic issues and for helping to improve the well-being of the inhabitants of the Arctic, particularly with regard to sustainable development and environmental protection issues (A/52/487, paras. 347–349). As a high-level intergovernmental forum, the Council provides a mechanism to address the common concerns and challenges faced by the Arctic Governments and the people of the Arctic. The eight members of the Arctic Council are Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States. The Council also has Permanent Participants, representing the majority of indigenous peoples in the region, and is open to the participation of non-Arctic States and intergovernmental organizations as observers. The chair and secretariat of the Council rotates every two years among the eight Arctic States, beginning with Canada in 1996.

407. On 5 February 1998, the Arctic Council established Terms of Reference for a Sustainable Development Programme. This affirmed the commitment of the eight Arctic States to sustainable development in the Arctic region, including economic and social development, improved health conditions and cultural well-being. It further affirmed the commitment of the Council to the protection of the Arctic environment, including the health of its ecosystems, maintenance of biodiversity in the region, and conservation and sustainable use of natural resources.

Baltic Sea

408. The first Convention on the Protection of the Marine Environment of the Baltic Sea Area was signed in 1974 by the coastal States of the Baltic Sea at that time. In 1992, a new Convention was signed by all the countries bordering on the Baltic Sea and by the European Economic Community. The governing body of the Convention is the Baltic Marine Environment Protection Commission, also known as the Helsinki Commission or HELCOM. The present contracting parties to HELCOM are Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, the Russian Federation and Sweden. Decisions taken by the Helsinki Commission, which are reached unanimously, are regarded as recommendations to the Governments concerned to be incorporated into the national legislation of the member countries.

409. The nineteenth meeting of the Helsinki Commission was held at Helsinki from 23 to 27 March 1998. The meeting dealt with the updating and strengthening of the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP); HELCOM's objectives and strategy concerning hazardous substances; agricultural pollution; the prevention of illegal discharges at sea; and nature conservation. There was a reaffirmation of the political commitment to achieve the strategic goals set in the 1988 Ministerial Declaration and to define a series of more specific targets to be reviewed in 2003 and achieved before 2005. The consequent decisions, the most important of which were taken at the ministerial level, give high priority to facilitating preventive and curative measures in the Baltic Sea region.

410. In view of the paramount importance of attaining ecological sustainability in the Baltic Sea region, the ministers also considered the potential role of the Helsinki Commission in the Baltic Agenda 21, a comprehensive vision of sustainable development in the entire Baltic Sea region, translated into practical actions to change regional economic policy. The ministers further recognized that the

political/economic alignments of the HELCOM Contracting Parties have changed considerably since the mid-1970s. They thus decided to undertake a review of HELCOM, focusing on its future role, objectives and strategies, to enable it to react more rapidly and effectively to environmental challenges. The major commitments at the ministerial level were highlighted in the concluding Ministerial Communiqué.

North-East Atlantic

411. The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) entered into force on 25 March 1998. The OSPAR Convention, which was opened for signature at the Ministerial Meeting of the Oslo and Paris commissions in Paris on 22 September 1992, replaces the Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft, 1972 (the Oslo Convention) and the Convention for the Prevention of Marine Pollution from Land-based Sources, 1974 (the Paris Convention). The OSPAR Convention has been signed and ratified by all of the Contracting Parties to the Oslo or Paris Conventions (Belgium, Denmark, Commission of the European Communities, Finland, France, Germany, Iceland, Ireland, Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom) and by Luxembourg and Switzerland.

412. Decisions, recommendations and all other agreements adopted under the Oslo and Paris Conventions will continue to be applicable, unaltered in their legal nature, unless they are terminated by new measures adopted under the OSPAR Convention. The Oslo and Paris commissions ceased to exist on 25 March 1998 with the entry into force of the OSPAR Convention, which will be administered by the OSPAR Commission.

413. The first Ministerial Meeting of the OSPAR Commission was held in conjunction with the 1998 annual meeting of the Commission in Sintra, Portugal on 22 and 23 July 1998. The main result of the meeting was the adoption of a new annex to the OSPAR Convention concerning the protection and conservation of the ecosystems and biological diversity of the maritime area covered by the Convention and a related appendix. Other outputs of the meeting were the adoption of strategies aimed at guiding future work of the Commission in the longer term with regard to hazardous substances, radioactive substances, eutrophication, conservation of the ecosystems and biological diversity of the maritime area; an action plan setting out actions for the period 1998–2003 to be taken by the Commission with a view to implementing those strategies; an OSPAR decision on the disposal of disused offshore installations; and new rules governing the participation of non-governmental organizations in the work of the Commission, with the intention of enabling them to participate at all levels of the Commission's working structure. At the end of the meeting, the ministers adopted the Sintra Statement, setting out the political impetus for future action by the OSPAR Commission with a view to ensuring the protection of the marine environment of the North-East Atlantic.

E. Preparations for the review of the sectoral theme of "oceans and seas" by the Commission on Sustainable Development in 1999

414. The General Assembly, at its nineteenth special session in June 1997, identified an urgent need to implement decision 4/15 of the Commission on Sustainable Development,[86] in which the Commission, *inter alia*, called for a periodic intergovernmental review by the Commission of all aspects of the marine environment and its related issues, as described in chapter 17 of Agenda 21, and for which the overall legal framework is provided by UNCLOS. The General Assembly therefore decided that the Commission should review under the heading of "oceans and seas" progress achieved in the implementation of chapter 17 and other relevant chapters of Agenda 21 at its seventh session in 1999.[87] The Assembly also decided that the review by the Commission would draw upon a report the preparation of which is to be coordinated by the Subcommittee on Oceans and Coastal Areas (SCOCA) of the Administrative Committee on Coordination (ACC) (see also para. 462). The results of the review by the Commission would then be considered by the Assembly under the regular agenda item "oceans and law of the sea".

415. The General Assembly at its nineteenth special session was very clear as regards the scope of the review of the sectoral theme of oceans and seas by the Commission in 1999, namely that it would entail a review of all aspects of the marine environment and its related issues as described in chapter 17 of Agenda 21. This was endorsed by some of the participants at the high-level segment at the sixth session of the Commission, who emphasized that, in considering the theme of oceans at its seventh session, the Commission should address the problems of the sustainable use of marine and coastal resources for development, coastal pollution and degradation, and marine pollution.[88] The importance of the Global Programme of Action for the Protection of the

Marine Environment from Land-based Sources of Marine Pollution was also stressed by them.

416. Other participants proposed that the preparations for the seventh session include an analysis of existing international agreements dealing with oceans and the degree to which they have been implemented.[89] This proposal requires careful consideration since it raises questions as to the competence and suitability of the Commission to review, take decisions, and possibly coordinate the activities of other intergovernmental organizations and convention secretariats on issues which are not within the scope of sustainable development, e.g. jurisdictional matters, navigational issues, etc. Moreover, an effective, comprehensive, integrated and multisectoral review of ocean issues requires the input and participation at meetings of a large number of national ministries; they should not be limited just to ministries with sectoral responsibilities such as the environment. In this connection, the General Assembly has accorded itself the mandate to undertake the review of all developments related to oceans and seas, as the global institution having the competence to do so.

417. With regard to the organization of work for the seventh session of the Commission on Sustainable Development, the Commission decided that one of the 1999 sessions of its inter-sessional working groups would be devoted to oceans and seas, and the comprehensive review of the Programme of Action for the Sustainable Development of Small Island Developing States.[90]

418. For its work at the seventh session, the Commission will have before it, in addition to the report prepared by SCOCA, other relevant documents, such as the report of the Expert Meeting on Environmental Practices in Offshore Oil and Gas Activities, held in the Netherlands in November 1997 (E/CN.17/1998/18), which had already been circulated at the sixth session of the Commission; the report submitted to the Commission by IMO, and the report on the second workshop on oceans, being organized by the United Kingdom and Brazil, to be held later this year.[91]

F. Integrated ocean and coastal zone management

419. Since UNCED in 1992, a review of progress achieved in the implementation of the concept of integrated ocean and coastal zone management indicates that initiatives at the national and local levels continue to increase and diversify. Different patterns of integrated management are being followed in different countries depending on their particular circumstances and interests and on the approaches chosen to address coastal and marine issues. The available literature shows a tapestry of initiatives, approaches and programmes and/or projects under way at the national or sub-national levels. At the international level, there are three major factors that may have a considerable influence on the manner in which integrated ocean and coastal zone management will evolve in the future.

420. The first factor is that integrated ocean and coastal zone management has become a central organizing concept and an appropriate framework to meet the commitments and obligations of recent UNCED-related international agreements and initiatives, such as the Convention on Biological Diversity; the Framework Convention on Climate Change; the Global Plan of Action for the Protection of the Marine Environment from Land-based Activities; the Programme of Action for the Sustainable Development of Small Island Developing States; the International Coral Reef Initiative and the 1996 Protocol to the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention).

421. With regard to climate change, at the International Workshop on Planning for Climate Change through Integrated Coastal Zone Management, held at Taipei, Taiwan, Province of China, from 24 to 28 February 1998, new guidelines for coastal managers and policy makers were formulated for incorporating principles and elements of integrated ocean and coastal zone management into national climate action plans required by the Framework Convention on Climate Change.

422. As to the Convention on Biological Diversity, the key operational objectives and activities of its work programme on integrated marine and coastal area management (IMCAM) for the period 1998–2000 include: (a) a review of existing instruments relevant to IMCAM and their application for the implementation of the Convention, encompassing the identification of existing mechanisms and instruments relevant to IMCAM and of focal points for its implementation; and (b) promoting the development and implementation of IMCAM at the local, national and regional levels, including the integration, within the framework of IMCAM, of biological diversity concerns in all socio-economic sectors adversely impacting the marine and coastal environment.

423. As to pursuing the objectives of the 1996 Protocol to the 1972 London Dumping Convention, it has been suggested that integrated ocean and coastal zone management could constitute a possible approach that the Contracting Parties may wish to consider, in view of the

increasing support which international funding institutions are giving to country-specific development and environmental projects initiated by the countries themselves. Thus, projects in support of the implementation of the Protocol within national integrated ocean and coastal zone management programmes could facilitate the implementation of the Protocol as well as meet priorities set by the international funding organizations. Furthermore, it has been stated that the IMCAM framework allows for investing in and building upon existing marine protection measures and administrative arrangements and could provide substantial flexibility for addressing the basic issues of capacity-building, human resources development, promoting pollution reduction and alternatives to sea disposal options, while avoiding duplication of efforts.

424. The application of the concept and tools of integrated ocean and coastal zone management to sectoral issues is addressed in the recently published FAO Guidelines on Integrated Coastal Area Management and Agriculture, Forestry and Fisheries. These guidelines address the incorporation of agriculture, forestry and fisheries planning into ICAM. Specifically, they are intended to help to develop awareness in the agriculture sector line agencies and among resource users with regard to the external or internal environmental effects that each sector may generate; and the environmental impacts originating outside the sector and felt in one or more of the sub-sectors. In addition, the guidelines indicate ways for planners and resource users to take these impacts into account in the formulation of plans. They examine issues specific to the agriculture, forestry and fisheries sectors and suggest the processes, information requirements, policy directions, planning tools and possible interventions that are necessary for integrated ocean and coastal zone management.

425. The second factor is the keen interest on the part of donors, practitioners and integrated ocean and coastal zone management experts in the results and accumulated experience that have arisen out of more than 20 years of application of relevant concepts in both developing and developed countries. This interest has emerged as the result of the fact that although there is a growing number of initiatives worldwide, at present the lessons learned from these initiatives are generally undocumented and the efficiency and effectiveness of learning from such practice is being compromised. Furthermore, the international Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) has identified the need for a framework that will allow documentation of trends, identification of their likely causes and objective estimation of the relative contributions of integrated ocean and coastal zone management programmes to social and environmental change.

426. The challenge is to develop a common methodology and indicators by which the impacts of the rapidly expanding number of such initiatives can be analysed and the results widely disseminated so that the collective learning process may be improved. As a response to this challenge, the United Nations Development Programme (UNDP) and the Swedish International Development Agency (SIDA) are sponsoring a multi-agency initiative led by the University of Rhode Island, United States, to develop a self-assessment manual for integrated ocean and coastal zone management projects. UNDP will use this material to prepare a Programme Advisory Note to assist programme staff in developing viable coastal management projects.

427. The third factor is provided by a new generation of regional projects in the area of international waters (funded by GEF). For example, the GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas has chosen Xiamen, one of the five special economic zones in China, as a demonstration site to test a working model for the application of an integrated coastal management system for mitigating marine pollution and achieving rapid economic development. Capacity-building plays an important role in these projects, as exemplified by some of their training components.

IX. Underwater cultural heritage

428. The Executive Board of UNESCO at its one hundred forty-first session in 1993 adopted a resolution by which it invited the Director-General to prepare a feasibility study on the drafting of a new convention for the protection of the underwater cultural heritage. On the basis of the feasibility study (146 EX/27), the Executive Board decided that further study was needed, in particular with regard to jurisdictional aspects of the proposal and its possible implications, taking into account the provisions of UNCLOS on national jurisdiction. The Director-General recommended that a group of experts be convened to discuss all aspects of the proposal, with emphasis on jurisdictional matters. The experts, acting in their personal capacity, met in May 1996 and agreed that there was a need for a legally binding instrument for the protection of the underwater cultural heritage and that UNESCO was the appropriate forum for its adoption. They also concluded that the problem required urgent attention since technological advances currently permitted the recovery of objects of archaeological or historical value from almost any depth of the ocean.

429. The Executive Board then invited the Director-General to prepare a draft convention, to circulate the draft for comments and to convene a small group of governmental experts, representing all regions, and representatives of competent international organizations to review the draft convention with the aim of submitting it to the General Conference of UNESCO at its thirtieth session in 1999.

430. The Division for Ocean Affairs and the Law of the Sea participated in the group of experts and has been closely involved in the preparation of the draft convention, which is being undertaken jointly by UNESCO and the Division. Two of the articles of the draft convention deal with jurisdictional aspects, in particular the rights to be exercised by coastal States in relation to the underwater cultural heritage when it is located in the territorial sea (article 4) or in the exclusive economic zone or on the continental shelf (article 5). It should be noted that UNCLOS deals with some aspects of the issues involved only in general terms, for example in articles 149 and 303.

431. The group of experts met in Paris from 29 June to 2 July 1998 to review the draft convention, which was well received in general, but some problems remain in relation to certain jurisdictional matters. Some States argued that the draft convention accords coastal States additional rights in the exclusive economic zone and on the continental shelf which were not expressly provided for in UNCLOS. Other parts of the draft were considered to be in need of further work, in particular with regard to the enforcement powers of the flag State, the port State and the coastal State. The question of the scope of application of the draft convention in relation to warships, vessels, and aircraft owned or operated by States also raised other problems.

432. It was agreed that another meeting of the group of experts was required, but the necessary funding was not available although one delegation offered to contribute. Assuming that the question of funding is resolved, the next meeting is scheduled to take place at UNESCO headquarters in Paris from 19 to 23 April 1999.

X. Marine science and technology

433. Marine science and technology witnessed advancements in many fields during the past year.[92] However, the need for conservation and management of living resources, the interest in genetic resources from the sea and the concerns about marine biodiversity have led to a recent surge in studies in marine biology.

Marine biology

434. A recent study has found that overfishing not only depletes the stocks of fish, it also has disruptive effects on the entire ecosystem. An analysis of global fish catches over the past five decades, from data collected by FAO, found that there has been a gradual depletion of larger and more commercially valuable species of fish high in the food chain (such as cod and haddock) and a corresponding rise of less valuable marine organisms and fish low in the food chain (such as anchovy). The results suggest a marked decline in the quality of the fish catch worldwide. This, of course, has important implications for long-term fisheries management. Such management practices will have to emphasize the rebuilding of fish populations embedded within functional food chains in large marine ecosystems (see also para. 263).

435. New research has revealed that nutrient-poor open tropical oceans are biologically more productive than previously believed. Such productivity results from a self-fertilizing process performed by a widely distributed marine organism, known as "saw dust", that often "blooms" on the ocean's surface. The blooms have been observed in tropical oceans by space shuttles and by colour-sensing satellites. The organism has the relatively rare capability of removing nitrogen from the atmosphere, converting it to ammonium, retaining some for its own nourishment and releasing the rest. The process enables the organism to live in nutrient-poor areas while adding previously unavailable nitrogen to the surface water. The new nitrogen can promote the growth of algae and other organisms. The large-scale existence of these photosynthetic bacteria (capable of using light to synthesize carbohydrates from carbon dioxide and water) and algae also has implications for global warming, among other things. These organisms remove carbon dioxide from the atmosphere through photosynthesis. The carbon becomes part of the marine food web and may be stored in the oceans for decades. Carbon dioxide increases have been suspected of contributing to global warming; if the productivity in the open ocean is greater than presumed, then these areas of ocean could have a much larger role in slowing down global warming.

436. For the first time, marine organisms have been found on the icy gas hydrate mounds on the deep ocean floor. In 1997, a team of scientists sampled what appears to be a new species of centipede-like worms living on and within such mounds. Researchers speculate that the worms may be feeding on chemosynthetic bacteria (bacteria whose life is based on chemical processes rather than photosynthesis) that grow on the compressed gas in the hydrates or otherwise living symbiotically with them. These worms are considered to be major players in a new and unique marine ecosystem.

437. Food to sustain biological communities on deep ocean floor is scarce. Bacteria growing near the hot hydrothermal vents or in the cold hydrocarbon seepage from sediments (including compressed gas hydrates) can be sources of food. Recently, another source of food which is sustaining a major community of sea creatures has been discovered on the deep ocean floor: – an unexpected variety of marine organisms growing on whale skeletons. Anaerobic bacteria (organisms that do not require air for growth) decompose the oils contained in whale bones and emit sulphides and other compounds. Another set of bacteria live off these sulphides, coating the bones in thick mats. These bacteria in turn support a variety of worms, mollusks, crustaceans and other animals. Whale bones observed on the deep ocean floor were fed on by 178 species while the most fertile known hydrothermal vent field supports 121 species and a single hydrocarbon seep might support 36 species at most. Some of the species apparently have evolved to feed exclusively on whale skeletons since large whales first appeared more than 40 million years ago.

Medicines from marine sources

438. Production of medicines from marine sources is an ongoing industry. New sources of medicine are being discovered every year. For example, a toxin has recently been discovered in marine sponges which can be modified to produce an anti-cancer drug. In 1997, an anti-cancer compound was isolated from a newly discovered species of coral and a pharmaceutical company has obtained a licence to produce the compound. Concern about the scarcity of the particular species of coral and its possible overexploitation has prompted scientists to produce the compound by synthetic means.

Ocean data

439. In an earlier report, mention was made of the benefits afforded to marine science by the release of vast amounts of oceanographic data as well as access to oceanographic equipment, previously available only for military purposes (see A/51/645, paras. 295–297). Formerly classified data on the thickness of sea ice in the Arctic Ocean, gathered by the United States Navy over several decades, was made available in the public domain in 1997. Many scientists believed that this data could be useful for studying global climate change, among other things.

440. There has also been an increase in military-civilian research projects. In many cases, civilian applications can benefit from military research and vice versa. Military-civilian partnership in research and development is not only synergistic, it is also cost-effective and fiscally prudent. One example is the programme of deriving high-quality coastal optics data from *in situ* and remote-sensing instruments, being carried out by the United States Naval Oceanographic Office and the National Aeronautics and Space Administration (NASA). Coastal margins are the most productive ocean environments, and approximately half of ocean productivity occurs in shallow coastal margins. A study of the optical properties of coastal waters is extremely useful in measuring concentrations of relevant constituents of the water column as well as determining depth and bottom topography.

441. In this context, it is worth nothing that the possibilities for the peacetime utilization of the navy's expertise is being studied extensively. For example, it was one of the major themes of a recent symposium organized by the North Atlantic Treaty Organization (NATO).[93]

Scientific instruments and equipment

442. Marine science and technology have been subjected to the same funding trends in recent years as any non-private sector activity. A re-examination of the role of the public sector vis-à-vis the market and an exercise of fiscal austerity has led to cuts or minimal increases, at the best, in government financing of research and development. As a response to such financial imperatives, the most salient feature of the recent advances in marine science and technology is the trend towards "cheaper and better".

443. Rapid advances have been made in underwater acoustic communications technology in the past few years. Research and development efforts have concentrated on improving performance while reducing costs. A cost-effective underwater acoustic modem introduced in 1997 is capable of transferring data at a rate of more than 2,400 bits per second (8 bits constitutes a byte), compared to 100 bits per second prior to the mid-1990s.

444. The need for obtaining better information about the ocean floor has led to recent advances in diving apparatus, submersibles, remotely operated vehicles (ROVs) and self-propelled autonomous underwater vehicles (AUVs). Rapid technological changes associated with signal processing, computer and laser technology, and a better understanding of the ocean environment have also resulted in a renewed emphasis on non-acoustic undersea imaging over the past decade. In this respect, key areas of development include video and camera system advances, photogrammetry (use of photographs for surveying), image processing, image compression, image sensor fusion (the combination of acoustic, optical, electromagnetic and chemical data with

geographic information system (GIS) data) and image formation and reconstruction (e.g., three-dimensional mapping of ocean floor). Areas of application of such undersea imaging advances include better identification of oilfields, search and rescue, mine detection, object identification and tracking, and navigational control.

445. Recent improvements in underwater positioning have been spurred by the precision-oriented needs of underwater archaeology, especially the ongoing French study of the remains of a lighthouse near the island of Pharos in the Mediterranean, believed to be the remains of the lighthouse of Alexandria, the so-called "seventh wonder of the world". In order to prove that several thousand antique stone elements scattered over a surface of 20,000 square metres really do constitute the remains of the famous ancient lighthouse, it was essential to locate precisely many of the underwater items with an accuracy not exceeding 5 centimetres. Such a precision positioning system has recently been developed, and is particularly suited to local three-dimensional positioning within a radius of up to 100 metres from the reference point. It is a fully stand-alone system, free of bottom-to-surface cables, and can be operated by a single specialized diver.

446. As water depth increases, the precision of data for detailed seabed mapping obtained through surface-operated survey systems becomes insufficient. On the other hand, cable-operated submerged systems in deep water are encountering certain problems: either reduced speed, as in the case of ROVs on the seabed, or reduced accuracy of positioning, as in the case of deep-tow vehicles operating in the water column. The recently developed AUVs are computer-guided, untethered vehicles, capable of overcoming many of these problems, but are expensive. For the purpose of maintaining the best possible data precision in deep water while achieving cost-effectiveness, new types of AUVs are being developed. For example, operational performance and survey capability of a new type of relatively inexpensive AUV has been demonstrated at a depth of 600 metres. In late 1997, the development of a prototype, operable in water depth down to 2,000 metres, has begun and is planned to be operational in 2000.

447. Until now, the sources of information about the coastal environment were limited to ships, buoys and satellites. A new source has recently been added: the underwater observatory linked to the Internet. This offers a cost-effective, constant information source capable of providing a relatively wider range of measurements, and at the same time able to operate in all types of weather. Since 1996, a long-term ecosystem observatory has been functioning in 15 metres of water (with the appropriate acronym LEO-15) in the highly dynamic environment of offshore north-eastern United States. The observatory consists of two instrumented platforms anchored to the sea floor. These two nodes are connected to a shore-based Internet facility. LEO-15 provides a fish-eye view of the ocean to a broad audience in an affordable and effective manner. Next year, small AUVs designed for remote environmental monitoring will dock at LEO-15 and periodically scout the nearby sea floor. Future LEOs are planned to be placed in deeper waters.

448. While LEO-15 is an unmanned underwater laboratory, another pioneering undersea coastal laboratory called Aquarius is functioning offshore Florida. Teams of scientists spend up to a week inside the lab at a depth of 10 metres studying nearby coral reefs. Such a lab can offer the advantages of staying in place for a long period and making long-term observations.

449. Concerns about climate change have prompted the development of cost-effective techniques and deployment systems aimed at obtaining time-series data from the deep ocean that enable scientists to study the nature of ocean variability on time scales ranging from seasons to decades. At present, time-series data are obtained by sampling a limited number of deep ocean sites using ships, often at long, and sometimes irregular, time intervals. Innovative techniques to be utilized by a new type of sensors which have operational capabilities and are well suited to long-term deployment have been recently developed. Such techniques would enable long-term time-series measurements to be made, which would help avoid the alternative of the complicated logistics and prohibitive costs of using dedicated vessels to maintain time-series stations.

Marine technology

450. A drive to find cost-effective methods to drill and complete wells in deepwater has led to the development work for a dual-purpose drilling/completing vessel with a dual derrick and dual rotary table. While drilling one well with one rotary table, the vessel will be able to carry out completion operations and set casings using the other.

451. Industry sources forecast that the move to deeper waters will raise the demand for floating production systems, including those capable of working at 1,000–2,000 metre depths, to 140 systems in the next 10 years from 90 in 1997. Such systems are expected to include floating production, storage and offloading (FPSO) vessels, semi-submersibles, tension-leg platforms and spars (see also para. 259).

452. Advances in deepwater pipelaying technologies have increased the industry's capability to lay pipes from about 150 metres in the 1970s to 1,650 metres in the 1990s.

Potentials for laying pipes to an approximate depth of 3,600 metres are being explored with the help of new-generation pipe-laying vessels and systems.

453. Technological innovations in nearshore mineral survey were prompted by a need for speeding up analysis, reacting to feedbacks and maintaining confidentiality of information that is sensitive for share markets. Such innovations include on-ship analysis of geophysical and geological survey data, recently carried out for the first time for diamond concessions offshore South Africa, and making provisional interpretation of seabed sediment characteristics relevant for diamonds and mineral sands mining from repeated *in situ* measurements obtained through cone penetrometer tests (CPT).

454. Nearshore heavy minerals such as monazite, zircon and other placers and phosphorites emit radiation, and the use of radiometric tools that measure radioactivity may be a low-cost method of systematic reconnaissance, prospecting and exploration of these minerals; such a method has recently been tested successfully.

455. Undersea communication has undergone remarkable technological advances in recent years. The first undersea fibre-optic cable was installed in 1988. By 1997, the total investment in undersea fibre-optic cable systems had risen to about $20 billion and is projected to increase to $35 billion in 2003. In November 1997, the world's longest submarine cable system, stretching 27,000 kilometres from the United Kingdom to Japan, went into commercial service. The system, known as FLAG (fibre-optic link around the globe), is composed of eight sections running through the Atlantic Ocean, the Mediterranean and Red seas, the Indian Ocean and the Pacific. It uses third-generation transoceanic fibre-optic cable technology capable of carrying up to 5.3 billion bits of data per second per pair of optical fibres, compared to 0.56 billion bits/second for second-generation technology. There are plans to launch a 300,000-kilometre global network called Project Oxygen costing $14 billion. This 100-billion bit/second system will connect every continent, except Antarctica, with 265 landing points in 171 countries. The project is scheduled to start in December 1998 and the first phase of the project is expected to be completed in early 2002.

456. An important side benefit of the recent increase in cable-laying activities has been the collection of new information about seabed characteristics resulting from the bathymetric, side-scan sonar and sub-bottom profiling surveys, usually covering a 1,000-metre-wide corridor along the cable routes.

457. Emerging trends in ocean recreation and tourism were identified by the Ministerial Conference on Oceans and New Tourism Dimensions organized by the World Tourism Organization in June 1998. According to the Secretary-General of that organization, "certain products ... are emerging today which will dominate the market tomorrow, such as: nature and ecotourism products, cruises, water sports, and tourism in the polar region".[94] Among the most popular tourism items for people looking for something "new" are thought to be tourist submarines, tours to Antarctica, and cruises.

458. For example, the cruise industry is growing at a phenomenal rate. It is estimated that about 7 million people took a cruise in 1997 and the number is projected to grow to 9 million by 2000. To keep pace with the forecast demand, 42 cruise vessels are currently under construction. The trend is towards building bigger cruise ships: one vessel currently in the planning stages is an eight-storey, 250,000 ton ship to accommodate 6,200 passengers.

459. An innovative use of ocean space is demonstrated by the world's first floating platform for launching spacecraft, called Odyssey, that was officially unveiled in May 1998 in the Russian Federation. The idea, initially developed by the designers at the Russian Space Corporation, envisages launching space rockets or satellites from a platform moored near the equator, where gravity is much lower than in places where main cosmodromes are located. This is expected to significantly cut costs of launching spacecraft and allow more useful cargo to be put into orbit. The idea was then put into effect by a commercial project called Sea Launch, implemented by four international corporations from both private and public sectors: Russian Federation, Ukraine, Norway (a shipbuilding company called Kvaerner) and the United States (Boeing Corporation).

XI. Cooperative mechanisms, capacity-building and information

A. Cooperative mechanisms

1. Subcommittee on Oceans and Coastal Areas of the Administrative Committee on Coordination

460. Established in 1993 on the recommendation of the Inter-Agency Committee on Sustainable Development (IACSD) (A/48/527, paras. 79–89), the Subcommittee convened at its sixth session at Lisbon from 20 to 23 January 1998. Representatives of the United Nations Division for Ocean Affairs and the Law of the Sea/Office of Legal

Affairs and the Division for Sustainable Development of the Department for Economic and Social Affairs, UNEP, FAO, UNESCO, IOC, WMO, IMO and IAEA participated in the session.

461. The Subcommittee's discussions covered a wide range of subjects, including: the development of the United Nations Ocean Atlas, with a prototype presentation at Expo 98; the need for the improved use of scientific data and information by decision makers in various sectors of society, taking El Niño as an example; an agreement on a set of principles to be used as a framework for an integrated report assessing the impacts of the International Year of the Ocean, 1998; and its role and functions as the steering committee on technical cooperation and assistance in the planning for the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. The Subcommittee forwarded to IACSD proposals in the latter regard, noting that the first intergovernmental review of the implementation of the Global Programme of Action was planned for the year 2000.

462. Also, bearing in mind the work programme for 1999 of the Commission on Sustainable Development and its focus that year on oceans and seas, as well as the role of the Subcommittee as task manager for chapter 17 of Agenda 21, the Subcommittee drew to the attention of IACSD its proposal for the preparation of a basic report, supplemented by three addenda, which might focus on: implementation of the Global Programme of Action; an overview of results of the International Year of the Ocean, 1998; and collaborative relevant activities of the United Nations system (see also paras. 414 and 418).

463. Furthermore, the Subcommittee, in emphasizing the importance of reporting and debate at the General Assembly under the expanded agenda item entitled "Oceans and the law of the sea", reiterated the views expressed at its fourth session (ACC/1996/8), in which, *inter alia*, it noted that the annual report to the General Assembly on the law of the sea would provide an opportunity for advising Governments on emerging trends, and recommended that the proposed periodic review of all aspects of the marine environment and related issues be considered by the General Assembly every three to five years under the agenda item "Oceans and the Law of the Sea" (ibid., para. 16).

2. Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection

464. Constituted in 1969 under an inter-agency Memorandum of Agreement, GESAMP is an expert scientific advisory body within and supported by the United Nations system, namely by: the United Nations, through its Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs; UNEP; UNESCO/IOC; FAO; WHO; WMO; IMO and IAEA. Its principal task is to provide scientific advice to the sponsoring agencies concerning the prevention, reduction and control of the degradation of the marine environment. The annual reports of GESAMP and the reports of its working groups thus represent substantial contributions to the technical work of the sponsoring agencies under their respective mandates and programmes of work, including in relation to the implementation of chapter 17, among others, of Agenda 21.

465. At its twenty-eighth session, held at Geneva from 20 to 24 April 1998 (GESAMP Reports and Studies No. 66), GESAMP, *inter alia*, reviewed the draft of the biennial report on the state of the marine environment and the drafts of selected chapters of the report on land-based sources and activities affecting the quality and uses of the marine, coastal and associated freshwater environment prepared by a working group dealing with the subject. The working group confirmed that the final drafts of those reports would be submitted for consideration at the twenty-ninth session of GESAMP in 1999. The working group on the evaluation of the hazards of harmful substances carried by ships reported on the completion of a major revision of its hazard evaluation procedure. Further, GESAMP agreed that aquaculture has a legitimate role in coastal development and that in order for it to be assigned an appropriate place and to achieve its full potential, aquaculture must be considered alongside other forms of coastal development within a wider coastal management framework.

466. The Division for Ocean Affairs and the Law of the Sea continues to support, albeit under budgetary constraints, the work of GESAMP in relation to the Division's mandate and programme of work and, like the other GESAMP sponsoring agencies, provides a technical secretary and supports the participation of experts in connection with GESAMP meetings (plenary and working groups).

467. Although established as an expert scientific advisory body within the United Nations system, GESAMP performs an important role in facilitating cooperation and coordination, through interaction among GESAMP technical secretaries designated by the sponsors from their respective secretariats.

3. Aquatic Sciences and Fisheries Abstracts

468. The Aquatic Sciences and Fisheries Abstracts (ASFA) is an inter-agency, international bibliographical information service initiated in 1970. Now comprising the world's most

comprehensive database within its scope of coverage, ASFA's objective is to disseminate information on the science, technology and management of the marine and freshwater environments to the world community. The United Nations, through the Division for Ocean Affairs and the Law of the Sea, is a co-sponsoring partner of ASFA together with FAO, IOC and UNEP, joined also by 4 international partners, 23 national partners/input centres[95] and the publishing partner, Cambridge Scientific Abstracts (CSA). The Division monitors documents and publications relating to the law of the sea and other marine-related matters (ocean law, policy and management, technology and non-living resources) from which abstracts and bibliographical data are prepared for inclusion in the ASFA computer-searchable database and CD-ROM and the corresponding ASFA monthly journals, namely: *ASFA 1 – Biological Sciences and Living Resources*; *ASFA 2 – Ocean Technology, Policy and Non-Living Resources*; *ASFA 3 – Aquatic Pollution and Environmental Quality*. The printed journals and the CD-ROM are available in the Division for use by Division and other staff of the Office of Legal Affairs and by other United Nations staff. Non-United Nations users have access to the ASFA database on a subscription basis. Since joining ASFA in 1977, the United Nations has supported its maintenance and further development.

469. The annual ASFA Board meeting addresses policy and technical issues related to enhancing the effectiveness of ASFA and its usefulness to an expanding user community. The 1998 Board meeting (Rome, 9–12 June 1998) addressed a number of priority issues, among them the adequacy of coverage by the input centres of literature within the comprehensive subject-matter scope of ASFA, and approaches to increasing the distribution of ASFA information products and services.

470. Regarding the former, the Division for Ocean Affairs and the Law of the Sea, for its own part and as a follow-up to the meeting, is exploring the possibility, despite resource constraints, of increasing its coverage of literature in the fields of ocean law, policy and management, technology and non-living resources, all of which are within its mandate.

471. Regarding the latter, a decision taken by the Board at its 1997 meeting led to an initiative by the ASFA publisher, CSA, and by FAO, which provides the ASFA secretariat, to distribute free of charge over an initial period of two years and the ASFA CD-ROM to the low-income food deficit countries (LIFDCs), beginning with the 41 LIFDCs located in Africa, that have the need and the ability to use it. CSA also agreed to expand this initiative to include its Internet Database Service and to extend the service to any African LIFDC that has access to the Internet.

B. Capacity-building

1. Fellowship

472. The Hamilton Shirley Amerasinghe Memorial Fellowship continues to attract a high degree of interest from candidates from all regions as well as among academic institutions. Each year, approximately 100 applications are received and currently 16 universities and institutions are participating in the fellowship programme. The programme is prized for the academic opportunity and the practical experience it provides for the fellows.

473. Owing to the high calibre of candidates who apply each year for the fellowship, the Fellowship Advisory Panel, which evaluates the candidates, last year requested the Under-Secretary-General, the Legal Counsel of the United Nations, to explore the possibility of increasing the endowment to enable the awarding of more than one fellowship per year. It also urged that facilities provided by the participating universities should be used to the fullest and that every effort should be made to accommodate more than one fellow per year. It further encouraged the highest-ranking unsuccessful candidates to apply directly to universities using the Fellowship Advisory Panel as a reference.

474. The General Assembly has repeatedly urged Member States, interested organizations, foundations and individuals to contribute voluntarily towards the financing of the Fellowship to enable a greater number of candidates to benefit from the fellowship.[96]

475. Previously the United Kingdom had made a special contribution to fund an extra fellowship at a United Kingdom participating university. This year, the Government of Germany has also expressed the wish to fund a fellowship programme at the Max Planck Institute in Germany. The Advisory Panel welcomed such contributions and expressed the hope that other countries might follow such examples.

476. The fellowship was established in 1981,[97] in memory of the late Hamilton Shirley Amerasinghe, the first President of the Third United Nations Conference on the Law of the Sea, in recognition of his contribution to the development of the law of the sea. The fellowship has been awarded annually for each of the last 12 years and previous fellows have come from the following countries: Nepal (1986), United Republic of Tanzania (1987), Chile (1988), Saint Lucia (1989), Sao Tome and Principe (1990), Croatia (1991), Thailand (1992), Kenya (1993), Seychelles and Cameroon (1994), Tonga (1995) and Indonesia (1996).

477. The fellowship is awarded by the Under-Secretary-General, the Legal Counsel, on the recommendation of the Advisory Panel consisting of renowned experts in the field of the law of the sea. The fellowship programme is one of the activities carried out by the Division for Ocean Affairs and the Law of the Sea within the framework of the United Nations Programme of Assistance in the Teaching, Study, Dissemination and Wider Application of International Law. It is intended primarily for expert nationals who are involved in ocean law or maritime affairs or related disciplines, either in government agencies and bodies or in educational institutions. Its aim is to assist such individuals or candidates in acquiring additional knowledge in ocean affairs and the law of the sea.

478. This year's panel was composed of the following: the former Permanent Representative of Sri Lanka to the United Nations, Ambassador Herman Leonard de Silva, who chaired the panel; the Permanent Representative of Jamaica, Ambassador M. Patricia Durrant; the former Permanent Representative of Germany, Ambassador Tono Eitel; the Permanent Representative of Egypt, Ambassador Nabil Elaraby; the Permanent Representative of Japan, Ambassador Hisashi Owada; the former Permanent Representative of the United Kingdom of Great Britain and Northern Ireland, Ambassador Sir John Weston KCMG; Professor John Norton Moore, Director of the Center for Oceans Law and Policy, University of Virginia, United States; and the Director of the Division for Ocean Affairs and the Law of the Sea, Mr. Ismat Steiner.

479. In December 1997, the twelfth fellowship was awarded to Mr. Fagaloa Tufuga of Samoa. He intends to undertake research in issues related to maritime boundary delimitation negotiations at the University of Southampton in the United Kingdom.

480. This year, the Max Planck Institute in Heidelberg, Germany, applied and was accepted as one of the participating universities. The following other universities and institutions participate in the fellowship: Center for Oceans Law and Policy, University of Virginia, Charlottesville, Virginia, United States; Dalhousie Law School, Halifax, Canada; Faculty of Law, University of Oxford, Oxford, United Kingdom; Faculty of Law, Institute of Maritime Law, University of Southampton, Southampton, United Kingdom; Graduate Institute of International Studies, Geneva; Institute of International Studies, University of Chile, Santiago; Marine Policy Center, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, United States; Netherlands Institute for the Law of the Sea, Faculty of Law, University of Utrecht, Utrecht, Netherlands; Research Centre for International Law, University of Cambridge, Cambridge, United Kingdom; Rhodes Academy of Oceans Law and Policy, Aegean Institute of the Law of the Sea and Maritime Law, Rhodes, Greece; School of Law, University of Georgia, Athens, Georgia, United States; School of Law, University of Miami, Coral Gables, Florida, United States; School of Law, University of Washington, Seattle, Washington, United States; William S. Richardson School of Law, University of Hawaii, Honolulu, Hawaii, United States. The participating universities or academic institutions provide the fellow attending them all tuition free of cost. However, costs to cover travel, boarding and lodging and book allowances are provided from the trust fund established by the fellowship programme.

2. TRAIN-SEA-COAST programme

481. The training activities of the Division for Ocean Affairs and the Law of the Sea are carried out under the TRAIN-SEA-COAST (TSC) programme, which has been designed to build up an in-country capacity to improve skills in integrated ocean and coastal management among policy makers and practitioners in developed as well as developing countries. The main objectives of the TSC programme are to strengthen the capabilities of local institutions (called course development units (CDUs)) to provide training and to do so within the framework of a network of participating institutions worldwide which share personnel and course material. The TSC programme, which initially established a network of 11 CDUs in 10 countries with the assistance of UNDP/Sustainable Energy and Environment Division and became operational in 1995, has entered a new phase and is being implemented through a UNDP/GEF programme entitled "Strengthening Capacity for Global Knowledge-Sharing in International Waters". The overall objective is to strengthen the capacities of the countries to integrate sustainable water resources management into their national planning processes and to develop and deliver courses of direct relevance to the key transboundary issues identified in GEF's International Waters portfolio.

482. The focus of the project initially is on the establishment of six regional GEF-funded CDUs associated with GEF International Waters projects. Within each region, an institution in one country hosts a TSC CDU. Each regional CDU will prepare one or more customized courses on a coastal or ocean management issue of relevance to the GEF International Waters projects and to priority global waters issues. While each regional CDU will develop courses that assist the regional project in meeting its objectives, these courses will be shared by the other regional GEF International Waters projects, or by other CDUs in the TSC network. This is possible since, as envisaged in the TSC

principles and reflected in the TSC network rules, a CDU may then import and adapt courses from other TSC members to meet their own course requirements by contributing one or more high-quality courses. Another salient characteristic of this new phase of the TSC programme is its focus on addressing key issues at the field level as identified by the GEF project coordinators as well as on inter-project cooperation.

483. The impact of this phase is twofold: (a) the building of in-country capabilities for course design and implementation at the national and regional levels to produce high-quality training courses tailored to the strategic needs of countries in their respective regions – this will enable them to utilize a more comprehensive approach to addressing transboundary water-related environmental concerns in the regions where GEF projects are located; and (b) through training enhancing the implementation of specific measures to address key problems in each of the regions. This is further augmented by the sharing system of the TSC network, which allows the transfer and adaptation of high-quality training materials.

484. Five new CDUs have been established in association with the following UNDP/GEF regional projects. An additional CDU will be designated within the next six months. The existing projects, CDUs and participating institutions are as follows: (a) Integrated Management of the Benguela Current Large Marine Ecosystem Project (CDU is located in Capetown, South Africa and the participating institutions are the University of Western Cape and the University of Cape Town, South Africa); (b) Environmental Management and Protection of the Black Sea Project (CDU is located in Constanza, Romania and the participating institutions are Ovidius University in Constanza, Romania and Black Sea University, Bucharest; (c) Industrial Water Pollution Control in the Gulf of Guinea Large Marine Ecosystem Project (CDU is located in Cotonou and the participating institution is the Centre for Environment and Development in Africa (CEDA), Cotonou; (d) Strategic Action Programme for the Red Sea and Gulf of Aden Project (CDU is located in Port Sudan, Sudan, and the participating institutions are Red Sea University and Fisheries Research Station and Sea Port Corporation, Port Sudan; (e) Strategic Action Plan for the Rio de la Plata Basin and its Maritime Front Project (CDU is located in Rocha, Uruguay and the participating institutions are the Project for the Conservation of the Biodiversity and Sustainable Development of the Eastern Wetlands (PROBIDES), Rocha, Uruguay, and the Universidad de la Republica and the Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente, Montevideo).

485. The TSC Course Developers Workshop and Planning Meeting took place at United Nations Headquarters from 17 to 28 August 1998 with the participation of 10 new course developers and 2 managers representing the GEF-funded CDUs. Additional participants included one course developer from the existing TSC/Thailand and one participant from the United Nations Institute for Training and Research (UNITAR). The objective of the Workshop was to provide each participating CDU with a team of professional course developers who can produce advanced, high-quality course material designed in accordance with the agreed TSC standards for exchange within the international TSC network.

486. The new phase of the TSC programme calls for effective coordination among all actors involved, namely the CDUs, the project coordinators and the TSC Central Support Unit (CSU) located at the United Nations Division for Ocean Affairs and the Law of the Sea. With pedagogical and technical support from the TSC CSU, each of the new CDUs will prepare, deliver and validate at least two standardized training packages (STPs) which take account of priority global waters issues.

C. Information system

487. The information system of the Division for Ocean Affairs and the Law of the Sea has been redesigned pursuant to the basic principles that the United Nations has a decisive comparative advantage in the provision of information at the global level, and that information systems can be powerful means of assisting Member States through strengthening the information base available to decision makers and managers.

488. The Division, consequently, has reformulated its activities with a view to strengthening its existing system for the collection, compilation and dissemination of information on the law of the sea and related matters, aimed at promoting a better understanding of the Convention, its uniform and consistent application and its effective implementation. The Division had previously identified the Internet as a major tool for strengthening its information system and has expanded its use. It not only allows for the collection of materials (documents, reports, legislation, etc.) from a wide variety of sources (Governments, international organizations and competent institutions) in a cost-effective manner, but also provides users with convenient means for obtaining timely, well-organized and cross-referenced materials and information dealing with various aspects of ocean affairs and the law of the sea. In this context, the Division, which had a pioneering role in the initial United Nations efforts in 1995

to present information via the Internet to the international community, has continued to develop and expand the "Oceans and law of the sea" Web site (http://www.un.org/Depts/los), as part of the Organization's Internet Web site.

489. The expanded site of the "Oceans and law of the sea" is intended to be a gateway to educate the general public about the role of the Convention on the Law of the Sea in their daily lives. This is accomplished by using the Convention, recognized as the framework for all ocean-related activities, as the point of reference to explain how the provisions of the Convention deal with issues that impact directly on their lives. The site does not attempt to cover all issues but rather serves as a central link for those interested in further, more detailed research about specific interrelated ocean issues. To accomplish this, the expanded site contains additional links, more than 1,100 to governmental, non-governmental, academic sites and those maintained by international organizations of the United Nations system. The expanded site is also designed for easy access in all countries, even in countries where Internet connection is less sophisticated.

490. The utilization of the oceans and law of the sea Web site has grown rapidly over time: in 1997 there were, on an average, 4,300 hits weekly, and in the period between January and September 1998 the number was more than doubled, to a weekly average of 9,000 hits.

491. The English version of the Web site has been publicly accessible for over two years. In conformity with United Nations policy, the Division is gradually developing the French version as resources permit. The materials and information currently available on the Division's gopher site (gopher://gopher.un.org:70/11/LOS) are being gradually incorporated into the Web site. Together, the Web and the gopher sites at present provide general information on oceans and the law of the sea and also provide users with many documents, including the full texts of the Convention, the 1994 Agreement relating to the implementation of Part XI and the 1995 Fish Stocks Agreement, along with information on their current status, and declarations made at the time of ratification or accession to those instruments. Information on the new ocean institutions established by the Convention, i.e. the International Seabed Authority, the International Tribunal for the Law of the Sea and the Commission on the Limits of the Continental Shelf, are also available. Users have access to many other selected documents and press releases, including reports to the General Assembly and verbatim records of General Assembly deliberations on the law of the sea and ocean affairs, as well as documents of the Meeting of States Parties and the Commission on the Limits of the Continental Shelf. A newsletter on current developments in the field of the law of the sea and ocean affairs constitutes an important part of the Web site.

492. In its resolutions 49/28 and 52/26 the General Assembly called for the development, in cooperation with the relevant international organizations, of a centralized system for providing coordinated information and advice on ocean affairs and the law of the sea. Aware of the strategic importance of the Convention as a framework for national, regional and global action in the marine sector, the Division recognizes the need to intensify the provision of coordinated and accurate information. To this end, the Division is developing the "Oceans and law of the sea" Web site as a single, comprehensive source for diverse and issue-specific information. This includes carefully researched hyperlinks to specialized agencies and international organizations where correct and authentic ocean-related information can be found. The Division itself maintains and further develops a number of databases which supplement the information provided through the Web and the gopher sites. At the same time, by providing links to the sites and databases of other organizations of the United Nations system, the Web site is becoming a centralized point of reference for information on oceans and the law of the sea.

493. Two additional areas of information continue to be developed by the Division, namely the Geographical Information System (GIS) database for the cartographic component of the limits of maritime zone (see para. 104) and the database of national maritime legislation (see A/52/487, para. 405).

Notes

[1] Robert Costanza et al., "The value of the world's ecosystem services and natural capital", *Nature*, vol. 387, No. 6630, 15 May 1997, pp. 253–260.

[2] These States and entities are: Algeria, Angola, Antigua and Barbuda, Argentina, Australia, Austria, Bahamas, Bahrain, Barbados, Belize, Benin, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Cameroon, Cape Verde, Chile, China, Comoros, Cook Islands, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic Republic of the Congo, Djibouti, Dominica, Egypt, Equatorial Guinea, *European Community*, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Iceland, India, Indonesia, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Lao People's Democratic Republic, Lebanon, Malaysia, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia (Federated States of), Monaco, Mongolia,

Mozambique, Myanmar, Namibia, Nauru, Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Philippines, Portugal, Republic of Korea, Romania, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principle, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Sweden, the former Yugoslav Republic of Macedonia, Togo, Tonga, Trinidad and Tobago, Tunisia, Uganda, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, Uruguay, Viet Nam, Yemen, Yugoslavia, Zambia and Zimbabwe.

[3] *The Law of the Sea: Declarations and statements with respect to the United Nations Convention on the Law of the Sea and to the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea* (United Nations publication, Sales No. E.97.V.3).

[4] These States are: Bahamas, Fiji, Iceland, Iran (Islamic Republic of), Mauritius, Micronesia (Federated States of), Namibia, Nauru, Norway, Russian Federation, Saint Lucia, Samoa, Senegal, Seychelles, Solomon Islands, Sri Lanka, Tonga and United States of America.

[5] Paper on "The 1994 Agreement relating to the implementation of Part XI of the 1982 United Nations Convention on the Law of the Sea: provisions dealing with production policy for deep seabed minerals", presented at the World Trade Organization, Committee on Trade and Environment, Geneva, 22–24 September 1997.

[6] See A/52/487, para. 37, for the description and composition of the Chambers; see also SPLOS/27, paras. 19–33.

[7] See Tribunal press releases ITLOS/press 13–15 and document SPLOS/27, paras. 51–61.

[8] *Official Records of the Economic and Social Council, 1998, Supplement No. 9* (E/1998/29), chap. I.B, decision 6/4.

[9] A/53/65-E/1998/5, annex.

[10] The text of the draft prepared by the group of experts is contained in document E/CN.15/1998/5, and changes suggested thereto by the working group on the implementation of the Naples Political Declaration and Global Action Plan against Organized Transnational Crime, established by the Commission on Crime Prevention and Criminal Justice, which met in April 1998 are contained in the report of the Commission, *Official Records of the Economic and Social Council, 1998, Supplement No. 10* (E/1998/30), annex III.

[11] *Official Records of the Economic and Social Council, 1998, Supplement No. 10* (E/1998/30), annex V.

[12] See statements made at the eighth Meeting of States Parties, SPLOS/31, para. 64.

[13] Conclusions of a round-table discussion on modern-day piracy organized by the Seamens Church Institute and the Maritime Law Association of the United States.

[14] Report prepared by ITF, London.

[15] Report of the 69th session of the MSC, MSC 69/22, para. 5.7 and annex 6.

[16] See submission by Spain to the Subcommittee on Safety of Navigation, document NAV 43/3/11.

[17] MSC 69/22, para. 5.11 and annex 7.

[18] Ibid., para. 5.7 and annex 6.

[19] Ibid., annex 7.

[20] See proposal by the United Kingdom, document NAV 44/3/3.

[21] MSC 69/22, para. 5.39.

[22] C 80/5/Add.1, para. 15.

[23] MSC 69/22, annex 8.

[24] Ibid., annex 9.

[25] Ibid., para. 5.30.

[26] See proposal submitted by France and the United Kingdom, document NAV 44/3/2.

[27] See proposal submitted by the United States, document NAV 44/3/1.

[28] FSI 6/12, sect. 3 and annex 2.

[29] See IMO briefings at http://www.imo.org.

[30] The full text of the amendments is contained in IMO document MSC 69/INF.3.

[31] These recommendations will be issued as circular STCW.7/Circ.8.

[32] See report of the nineteenth Consultative Meeting, LC 19/10, paras. 4.14–4.16.

[33] OSPAR decision 98/3 enters into force on 9 February 1998. It was adopted at the Ministerial Meeting of the OSPAR Commission on 22 and 23 July 1998 (see paras. 411–413 below). The 1992 Convention, which entered into force on 25 March 1998, allows for the possibility of disposal at sea of a disused installation or leaving it wholly or partly in place.

[34] *Official Records of the Economic and Social Council, 1996, Supplement No. 8* (E/1996/28), chap. I.C, decision 4/15.

[35] See Conclusions of the Joint Chair. The document was circulated at the sixth session of the CSD.

[36] See IMO document MEPC 41/7/2.

[37] See IMO document MEPC 41/7/3.

[38] FAO press release 98/31.

[39] FAO Fisheries Department Projection of World Fishery Production in 2010.

[40] Statement by M. Hayashi, Assistant Director-General, Fisheries Department, FAO, "*Conservation of the coastal and marine environment through sustainable resources management in fisheries*", World Environment Day, FAO, 5 June 1998.

[41] See *The New York Times*, 10 February 1998.

[42] Environmental Defense Fund Letter, *Closures will benefit New England Fisheries* (New York, EDF, 1998).

[43] Paper presented by Greenpeace International, "Overfishing and excessive capacity", 25 November 1997.

[44] See statement by M. Hayashi, op. cit. (note 40 above).

[45] Ibid.

[46] Downes, David and Van Dyke, Brennan, *Fisheries Conservation and Trade Rules: Ensuring that Trade Law Promotes Sustainable Fisheries* (Washington, D.C., Center for International Environmental Law, Greenpeace, 1998).

[47] Declaration of the Third Conference of Ministers of Fisheries, A Toxa, Spain, 17–19 September 1997.

[48] North-East Atlantic Fisheries Commission press release (http://www.maff.gov.uk/inf/newrel/neafc297.htm).

[49] FAO Fisheries Department document (http://www.fao.org/waicent/faoinfo/fishery/agreem/codecond/cecaf2.htm).

[50] See LOS Bulletin No. 37.

[51] FAO documents GFCM/XXIII/98/INF.1 and 5.

[52] FAO Fisheries Report No. 565 (http://fao.org/waicent/faoinfo/fishery/agreem/codecond/swiosumf.htm).

[53] NPAFC Annual Report 1997, Vancouver, Canada, 1998; *The Newsletter of NPAFC*, winter 1998, vol. 2, No. 1.

[54] Report of the Fourth Annual Meeting, http://www.home.aone.net.au/ccsbt4.

[55] World Wide Fund for Nature (WWF) press releases, 5 and 7 November 1997.

[56] Report of CCAMLR to the Twenty-second Antarctic Treaty Consultative Meeting (XXII ATCM/IP21), April 1998, para. 8.

[57] Ibid., paras. 9 and 10.

[58] Ibid., para. 26.

[59] WWF press releases, 5 and 7 November 1997.

[60] Ibid.

[61] *Convention on the Conservation of Migratory Species of Wild Animals (CMS) Bulletin*, No. 7, December 1997.

[62] *Mining Journal*, vol. 330, No. 8467, 13 February 1998, p. 123.

[63] See *The New York Times*, 30 December 1997.

[64] *Sea Technology*, vol. 39, No. 1, January 1998, p. 14.

[65] Richard Wheatly and Barbara Saunders, "1997 OTC highlights 50 years of offshore technological progress", *Oil and Gas Journal*, vol. 95, No. 20, 12 May 1997, p. 22.

[66] *Platt's Oilgram News*, vol. 75, No. 241, 12 December 1997, p. 4; vol. 76, No. 98, 22 May 1998, p. 3.

[67] Bellagio Conference Statement.

[68] The document is available on the OSPAR home page at http://www.ospar.org.

[69] Marine protected areas have been defined by the World Conservation Union (IUCN) "as areas of intertidal or subtidal terrain together with their overlying waters and associated flora, fauna, historical and cultural features, which have been reserved to protect part or all of the enclosed environment".

[70] References to these protocols, including their status can be found in *The Law of the Sea: Multilateral Treaties – A Reference Guide to Multilateral Treaties and other International Instruments related to the United Nations Convention on the Law of the Sea* (revised and updated as of 31 December 1996) (United Nations publication, Sales No. E.97.V.9).

[71] See document UNEP(WATER)/GPA-IG.2/4 of 5 May 1998, "Consideration of further steps, timetable and modalities for the activities of the GPA Coordination Office-The Hague".

[72] Report of the nineteenth Consultative Meeting, IMO document LC 19/10, annex 2.

[73] The Programme was adopted pursuant to resolution LC.55(SM) concerning technical cooperation and assistance activities related to the London Convention, 1972, which was adopted at the Special Meeting of Contracting Parties to Consider and Adopt the 1996 Protocol to the London Convention 1972, and also in response to the findings of the Global Waste Survey.

[74] See LC 19/10, annex 4.

[75] See report of the fortieth session of the Marine Environment Protection Committee, document MEPC 40/21, annex 4.

[76] MEPC at its thirty-sixth session had requested a GESAMP/IMO panel to review the hazard evaluation procedures that had been developed in 1972 for MARPOL 73/78, and also to examine the possibility of creating a harmonized system with other non-maritime chemical transportation regulations.

[77] See MEPC 40/21, paras. 8.10-8.11; and summary of replies from member States in document MEPC 42/11/1.

[78] For the text of the Protocol, see document MP/CONF.3/34; the Final Act is in document MP/CONF.3/33/Rev.1.

[79] For the text of the resolutions, see MP/CONF.3/35.

[80] Text is in document MEPC 42/INF.3.

[81] See report of the first session (UNEP/POPS/INC.1/7).

[82] See *Official Records of the General Assembly, Fifty-second Session, Supplement No. 25* (A/52/25), annex.

[83] FCCC/CP/1995/7/Add.1, decision 1/CP.1.

[84] *Official Records of the Economic and Social Council, 1998, Supplement No. 9* (E/1998/29), chap. I.B, decision 6/3, para. 13.

[85] The Division for Ocean Affairs and the Law of the Sea contributed to the Conference by advising African States about the framework for sustainable marine development provided by UNCLOS.

[86] See *Official Records of the Economic and Social Council, 1996, Supplement No. 8* (E/1998/28), chap. I.C, decision 4/15, para. 45 (a).

[87] See *Official Records of the General Assembly, Nineteenth Special Session, Supplement No. 2* (A/S-19/33), annex, chap. III.A, para. 36, and appendix.

[88] *Official Records of the Economic and Social Council, 1998, Supplement No. 9* (E/1998/29), chap. III.C, para. 38.

[89] Ibid., para. 39.

[90] Ibid., chap. I.B, decision 6/6, para. 1 (a).

[91] The first workshop was held in November/December 1995; the report thereon (E/CN.17/1996/23) was submitted to the Commission at its fourth session.

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[92] The material in this section has been collected from various issues of a number of newspapers, bulletins, and scientific and trade journals. For specific references, contact the Division for Ocean Affairs and the Law of the Sea.

[93] SACLANT/EXPO '98 Symposium on "Emerging Maritime Imperatives for the Next Millennium", held at Lisbon on 3 and 4 September 1998, organized by the Supreme Allied Commander Atlantic (SACLANT), NATO. The Division for Ocean Affairs and the Law of the Sea participated in the Symposium and presented a paper dealing with the international framework for the peaceful conduct of future maritime economic activities, as laid down in UNCLOS.

[94] World Tourism Organization, "WTO picks hot tourism trends for 21st century", Press release, Lisbon, 4 June 1998, p. 1.

[95] International partners: International Centre for Living Aquatic Resources Management (ICLARM); International Council for the Exploration of the Sea (ICES); World Conservation Union (IUCN); and Pacific Islands Marine Resources Information System (PIMRIS). National partners: Argentina, Australia, Canada, Chile, China, Cuba, Estonia, France, Greece, Germany, India, Japan, Kenya, Lithuania, Mexico, Norway, Poland, Portugal, Russian Federation Sweden, Ukraine, United Kingdom and United States.

[96] See, for example, General Assembly resolutions 52/26, para. 13; and 51/34, para. 12.

[97] See General Assembly resolution 36/79.